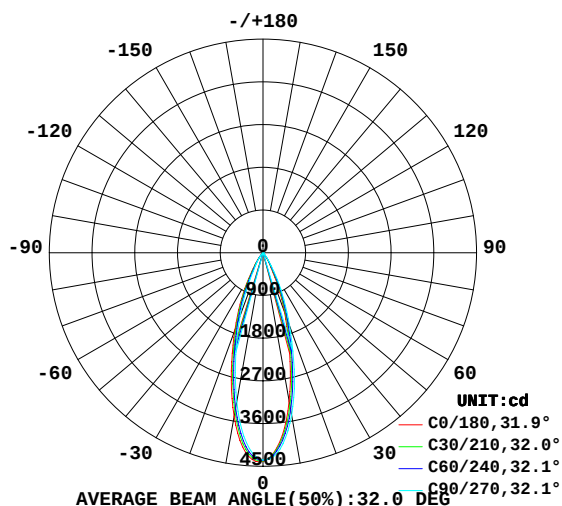


LUMINAIRE PHOTOMETRIC TEST REPORT

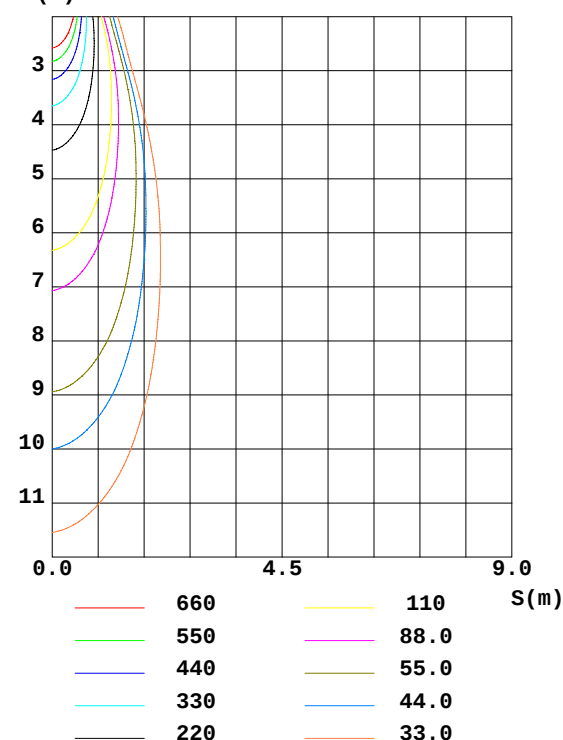
NAME: CL-Halo-D18 3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 83.48 lm/W			
MODEL		Imax(cd)	4409	S/MH(C0/180)	0.49
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	0.56
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1562.8	η UP, DN(C0-180)	0.2, 52.0
NOMINAL FLUX(lm)	1562.84	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2, 47.6
LAMPS INSIDE	1	η up(%)	0.4	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	24	η down(%)	99.6	CIBSE SHR MAX	0.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3175	3313	3475	3558	3503	3365	3190	3066	0- 10	365.7	365.7	23.4, 23.4
20	1333	1468	1638	1749	1731	1598	1411	1271	10- 20	649.6	1015	65, 65
30	305.9	355.1	461.0	556.2	532.4	432.6	331.2	292.6	20- 30	399.7	1415	90.5, 90.5
40	34.62	47.72	67.17	89.81	91.32	72.95	48.62	32.28	30- 40	123.5	1538	98.4, 98.4
50	3.679	4.527	6.023	6.981	6.637	5.564	4.188	3.454	40- 50	15.40	1554	99.4, 99.4
60	0.8229	1.036	1.395	1.643	1.569	1.274	0.9405	0.7289	50- 60	2.380	1556	99.6, 99.6
70	0	0	0	0.0003	0	0	0	0	60- 70	0.4120	1557	99.6, 99.6
80	0	0	0	0	0	0	0	0	70- 80	0.0000	1557	99.6, 99.6
90	0	0	0	0	0	0	0	0	80- 90	0	1557	99.6, 99.6
100	0	0	0	0	0	0	0	0	90-100	0	1557	99.6, 99.6
110	0	0	0	0	0	0	0	0	100-110	0	1557	99.6, 99.6
120	0	0	0	0	0	0	0	0	110-120	0	1557	99.6, 99.6
130	0.1787	0.1486	0.0994	0.0285	0.1326	0.1441	0.1836	0.2621	120-130	0.0311	1557	99.6, 99.6
140	1.192	1.062	0.8744	0.7172	0.8509	0.9511	1.108	1.265	130-140	0.3779	1557	99.6, 99.6
150	3.301	3.077	2.754	2.503	2.613	2.816	3.099	3.313	140-150	1.150	1558	99.7, 99.7
160	6.061	5.840	5.496	5.212	5.274	5.446	5.746	5.968	150-160	1.932	1560	99.8, 99.8
170	8.177	7.996	7.783	7.553	7.652	7.674	7.847	7.987	160-170	1.896	1562	99.9, 99.9
180	8.952	8.848	8.801	8.761	8.962	8.844	8.797	8.768	170-180	0.7897	1563	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

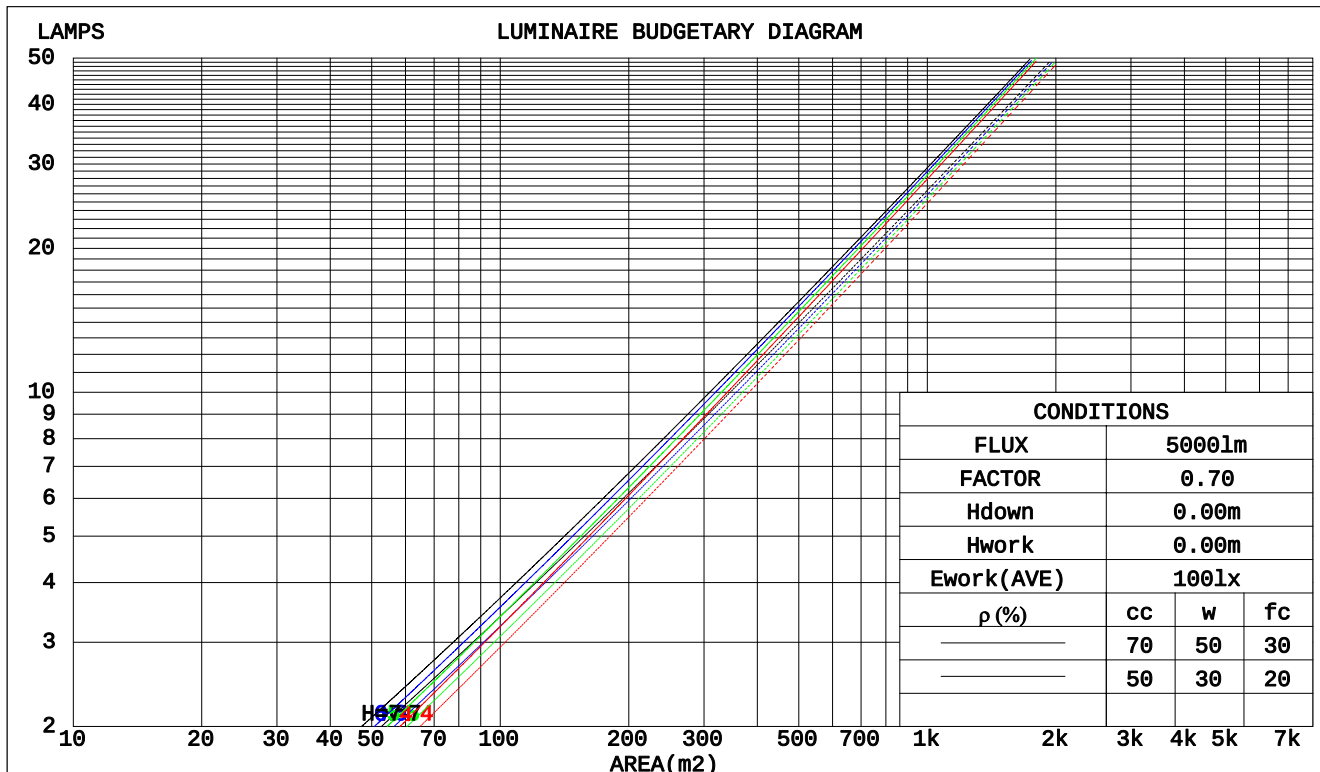
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: tang
 Test Date: 2022-04-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
 Humidity: 65.0%
 Test Distance: 7.100m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Halo-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.06	1.03	1.00	1.04	1.01	.99	1.01	.99	.97	.98	.96	.95	.95	.94	.93	.91
3.0	1.01	.97	.94	.99	.96	.93	.97	.94	.91	.94	.92	.90	.92	.90	.88	.87
4.0	.96	.92	.88	.95	.91	.88	.93	.89	.87	.91	.88	.86	.89	.87	.85	.83
5.0	.92	.87	.84	.91	.86	.83	.89	.85	.82	.87	.84	.82	.86	.83	.81	.80
6.0	.88	.83	.80	.87	.82	.79	.86	.82	.79	.84	.81	.78	.83	.80	.78	.76
7.0	.84	.79	.76	.83	.79	.76	.82	.78	.75	.81	.78	.75	.80	.77	.75	.73
8.0	.81	.76	.73	.80	.76	.73	.79	.75	.72	.78	.75	.72	.77	.74	.72	.71
9.0	.78	.73	.70	.77	.73	.70	.76	.72	.69	.75	.72	.69	.75	.71	.69	.68
10.0	.75	.70	.67	.74	.70	.67	.74	.70	.67	.73	.69	.67	.72	.69	.66	.65



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: Halo-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

ρ _{cc}	80%			70%			50%			30%			10%			0	
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)										
0.0																	
1.0	.150	.085	.027	.143	.082	.026	.130	.075	.024	.119	.068	.022	.108	.063	.020		
2.0	.140	.077	.024	.135	.074	.023	.124	.069	.021	.115	.064	.020	.106	.060	.019		
3.0	.132	.070	.021	.127	.068	.021	.119	.064	.020	.110	.060	.019	.103	.057	.018		
4.0	.125	.065	.019	.121	.063	.019	.113	.060	.018	.106	.057	.017	.100	.054	.017		
5.0	.119	.060	.017	.115	.059	.017	.109	.057	.017	.102	.054	.016	.097	.052	.016		
6.0	.113	.057	.016	.110	.055	.016	.104	.053	.016	.099	.051	.015	.094	.049	.015		
7.0	.108	.053	.015	.105	.052	.015	.100	.051	.015	.095	.049	.014	.091	.047	.014		
8.0	.103	.050	.014	.101	.050	.014	.096	.048	.014	.092	.047	.013	.088	.045	.013		
9.0	.099	.048	.013	.097	.047	.013	.093	.046	.013	.089	.045	.013	.086	.044	.013		
10.0	.095	.046	.013	.093	.045	.013	.090	.044	.012	.086	.043	.012	.083	.042	.012		

ρ _{CC}	80%			70%			50%			30%			10%			0	
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021		
1.0	.172	.161	.150	.147	.138	.129	.101	.095	.089	.058	.055	.052	.019	.018	.017		
2.0	.155	.136	.119	.133	.117	.103	.091	.081	.072	.052	.047	.042	.017	.015	.014		
3.0	.141	.116	.097	.121	.100	.084	.083	.070	.059	.048	.041	.035	.015	.013	.011		
4.0	.129	.101	.080	.111	.088	.069	.076	.061	.049	.044	.036	.029	.014	.012	.010		
5.0	.120	.089	.067	.103	.077	.058	.071	.054	.041	.041	.032	.024	.013	.010	.008		
6.0	.111	.080	.057	.096	.069	.049	.066	.048	.035	.038	.028	.021	.012	.009	.007		
7.0	.104	.072	.049	.090	.062	.042	.062	.043	.030	.036	.026	.018	.012	.008	.006		
8.0	.098	.065	.042	.084	.056	.037	.058	.040	.026	.034	.023	.016	.011	.008	.005		
9.0	.093	.060	.037	.080	.052	.032	.055	.036	.023	.032	.021	.014	.010	.007	.005		
10.0	.088	.055	.033	.076	.048	.029	.053	.034	.020	.031	.020	.012	.010	.007	.004		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: Halo-D18-3000k-RA90-34D						TYPE:					WEIGHT:				
DIM.:						SPEC.:					SERIAL No.:				
MFR.: VD						SUR.:					PROTECTION ANGLE:				
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise					Viewed endwise				
x = 2H y = 2H	1.1	1.9	1.3	2.0	2.2	2.4	3.2	2.6	3.3	3.5	2.4	3.2	2.6	3.3	3.5
3H	1.0	1.7	1.2	1.8	2.0	2.3	2.9	2.5	3.1	3.3	2.3	2.9	2.5	3.1	3.3
4H	0.9	1.5	1.1	1.8	2.0	2.2	2.8	2.4	3.0	3.3	2.2	2.8	2.4	3.0	3.3
6H	0.8	1.4	1.1	1.6	1.9	2.1	2.7	2.4	2.9	3.2	2.1	2.7	2.4	2.9	3.2
8H	0.7	1.3	1.1	1.6	1.9	2.0	2.6	2.3	2.9	3.1	2.0	2.6	2.3	2.9	3.1
12H	0.7	1.3	1.0	1.5	1.8	2.0	2.6	2.3	2.8	3.1	2.0	2.6	2.3	2.8	3.1
4H 2H	0.9	1.5	1.2	1.8	2.0	2.2	2.8	2.4	3.0	3.3	2.2	2.8	2.4	3.0	3.3
3H	0.7	1.3	1.0	1.5	1.8	2.0	2.6	2.3	2.8	3.1	2.0	2.6	2.3	2.8	3.1
4H	0.6	1.1	1.0	1.4	1.7	1.9	2.4	2.2	2.7	3.0	1.9	2.4	2.2	2.7	3.0
6H	0.5	1.0	0.9	1.3	1.7	1.8	2.3	2.2	2.6	2.9	1.8	2.3	2.2	2.6	2.9
8H	0.5	0.9	0.8	1.2	1.6	1.7	2.2	2.1	2.5	2.9	1.7	2.2	2.1	2.5	2.9
12H	0.4	0.8	0.8	1.2	1.6	1.7	2.1	2.1	2.5	2.8	1.7	2.1	2.1	2.5	2.8
8H 4H	0.5	0.9	0.8	1.2	1.6	1.7	2.2	2.1	2.5	2.9	1.7	2.2	2.1	2.5	2.9
6H	0.3	0.7	0.8	1.1	1.5	1.6	2.0	2.1	2.4	2.8	1.6	2.0	2.1	2.4	2.8
8H	0.3	0.6	0.7	1.0	1.5	1.6	1.9	2.0	2.3	2.8	1.6	1.9	2.0	2.3	2.8
12H	0.2	0.5	0.7	0.9	1.4	1.5	1.8	2.0	2.2	2.7	1.5	1.8	2.0	2.2	2.7
12H 4H	0.4	0.8	0.8	1.2	1.6	1.7	2.1	2.1	2.5	2.8	1.7	2.1	2.1	2.5	2.8
6H	0.3	0.6	0.7	1.0	1.5	1.6	1.9	2.0	2.3	2.8	1.6	1.9	2.0	2.3	2.8
8H	0.2	0.5	0.7	0.9	1.4	1.5	1.8	2.0	2.2	2.7	1.5	1.8	2.0	2.2	2.7
Variations with the observer position at spacings:															
S = 1.0H	+ 4.3 / -16.9					+ 4.8 / -17.1									
1.5H	+ 6.9 / -12.9					+ 7.4 / -14.5									
2.0H	+ 5.7 / -11.2					+ 7.6 / -11.0									

CIE Pub.117 Corrected 1563 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.6)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: Halo-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

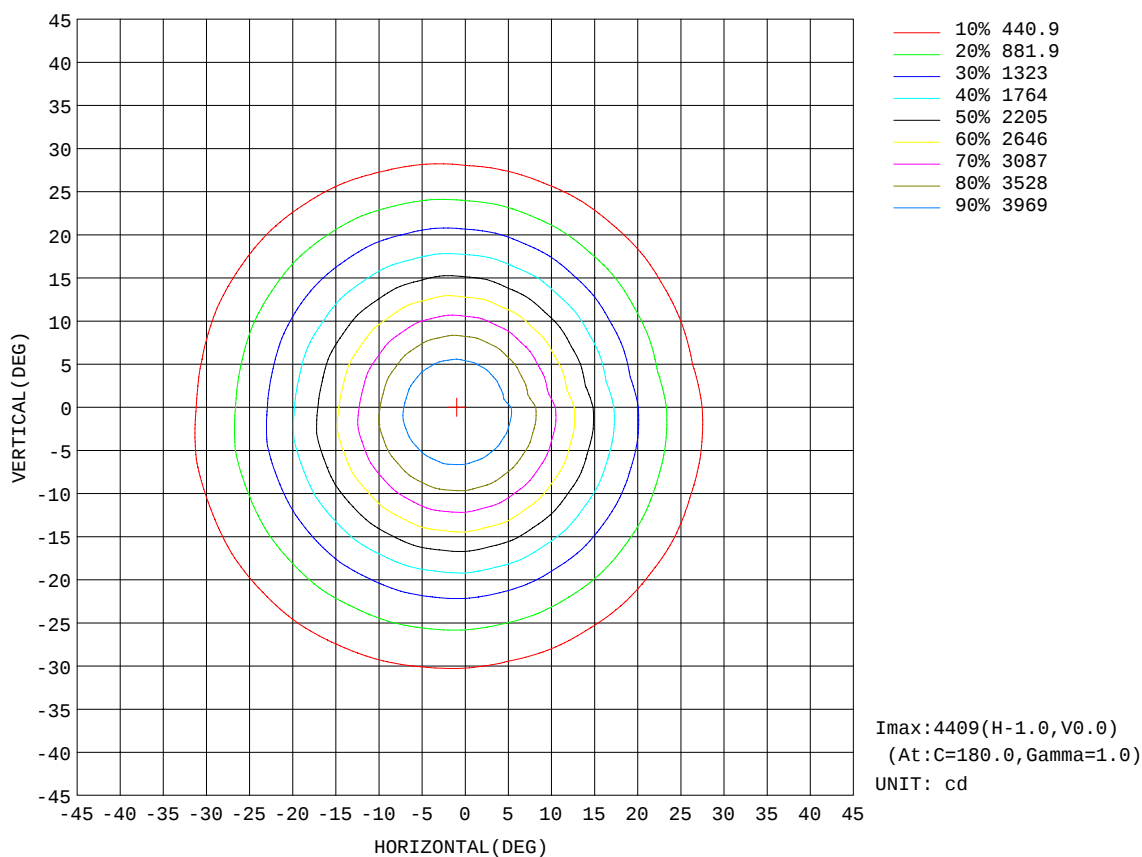
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	81	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	91	88	85
1.00	101	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	107	103	100	106	102	100	104	101	99	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	114	112	113	112	110	109	108	107	100
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: Ha1o-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

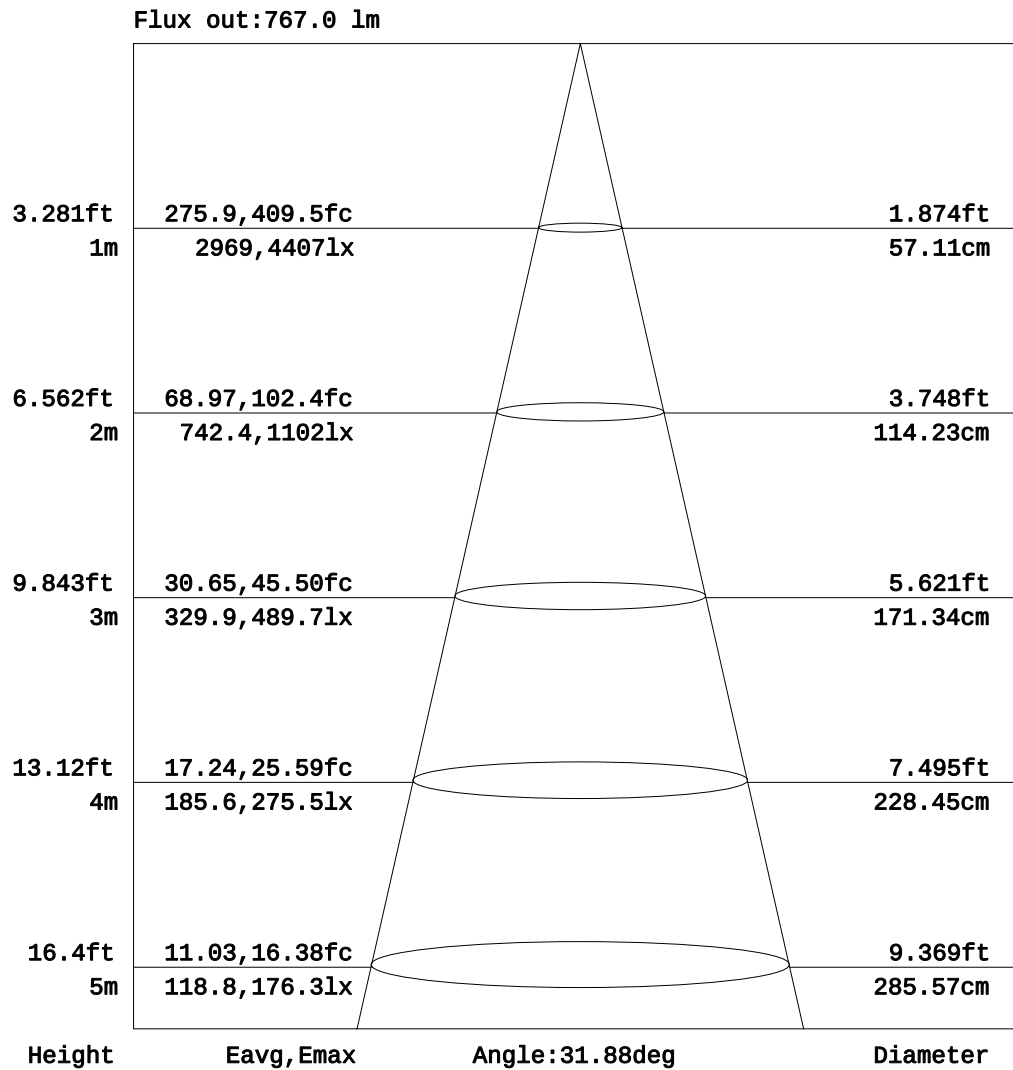


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

AAI Figure

NAME: Ha1o-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



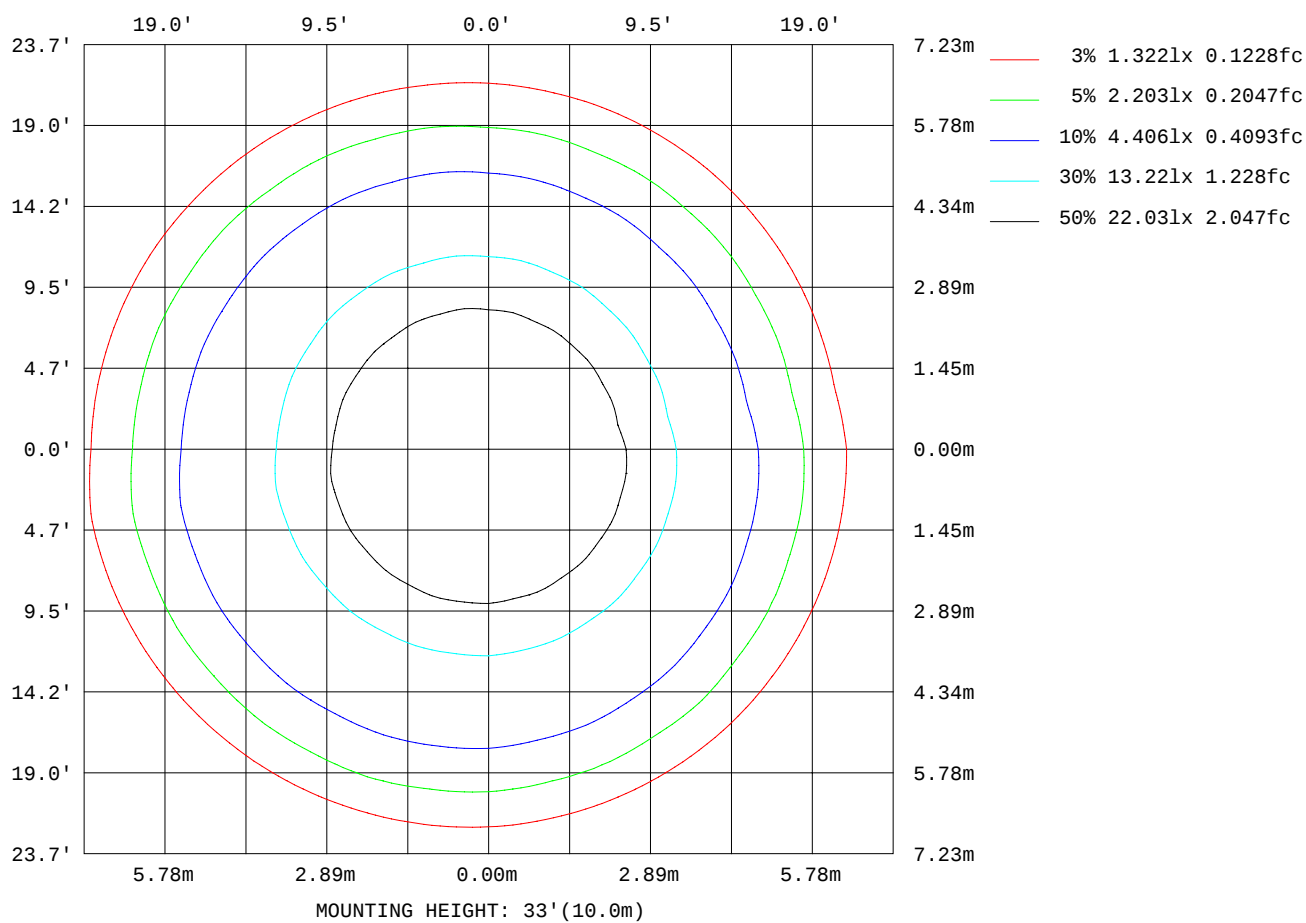
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: Ha1o-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Halo-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	1562.84	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.1	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G	C plane(deg)																		
deg	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	32	33	34	36	38	40	43	46	48	50	52	54	55	57	57	59	58	58	55
60	16	16	18	19	20	21	23	25	27	28	29	30	32	32	33	34	34	33	31
65	1	0	2	2	5	5	7	8	10	11	13	14	16	16	17	17	18	17	15
70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum calculated	specified maximum	maximum measured	specified maximum
Category 1	55 to 90	59	200	---	500
Category 2	65 to 90	18	200	---	500
Category 3	75 to 90	0	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Halo-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	1562.84	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.1	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	32	33	34	36	38	40	43	46	48	50	52	54	55	57	57	59	58	58	55
60	16	16	18	19	20	21	23	25	27	28	29	30	32	32	33	34	34	33	31
65	1	0	2	2	5	5	7	8	10	11	13	14	16	16	17	17	18	17	15
70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

range (deg)	Maximum measured	Average Luminance(cd/sq.m)			
		Maximum limit for screen type & software category used			
		Type I,II screen Some neg.s'ware	Type I,II screen Only pos.s'ware	Type III screen Some neg.s'ware	Type III screen Only pos.s'ware
55 to 90	59	1000	1500	200	500
65 to 90	18	1000	1500	200	500

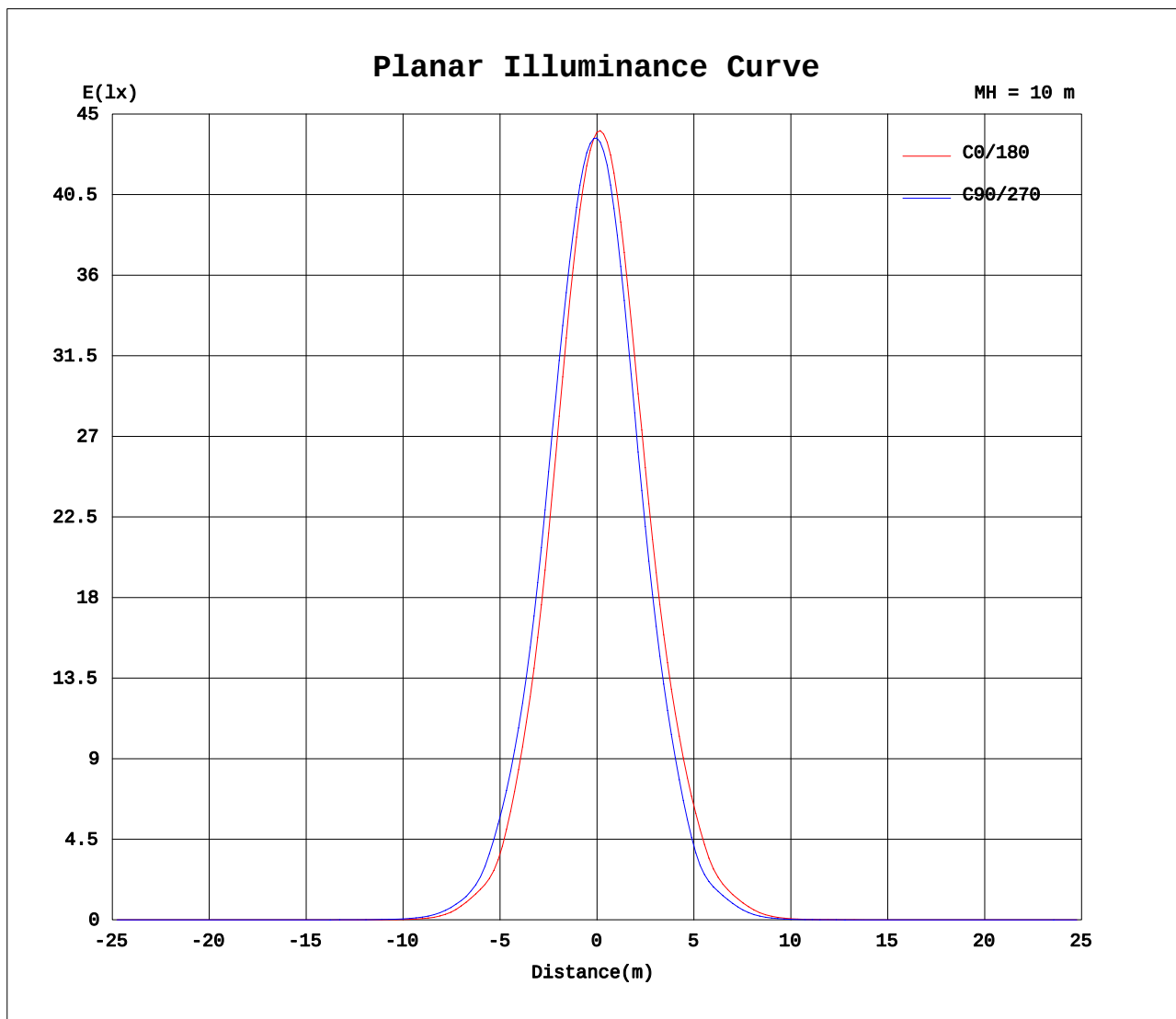
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

The luminaire satisfies the specified luminance criteria for
Negative Software with Type I & II Screen(Good to Moderate treatment).

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Halo-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(°)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	4399	4395	4388	4386	4381	4378	4375	4372	4369	4366	4365	4360	4359	4355	4354	4349	4349	4344	4399
5	4013	4028	4030	4049	4052	4077	4086	4113	4122	4150	4163	4188	4195	4210	4209	4220	4218	4227	4220
10	3175	3218	3225	3272	3287	3339	3360	3416	3430	3475	3490	3530	3536	3563	3553	3574	3557	3563	3503
15	2168	2213	2224	2286	2301	2370	2391	2465	2475	2540	2550	2602	2601	2640	2631	2664	2641	2658	2579
20	1333	1367	1381	1421	1443	1493	1513	1565	1590	1638	1649	1688	1703	1746	1751	1781	1773	1792	1731
25	680	713	734	774	801	845	873	911	934	972	993	1023	1034	1069	1080	1096	1097	1117	1066
30	306	316	320	336	344	367	381	410	427	461	481	511	524	554	559	578	572	582	532
35	142	145	150	155	161	167	173	181	189	197	206	215	226	237	249	259	267	277	257
40	34.6	37.1	39.2	42.9	45.3	50.1	53.6	58.2	61.6	67.2	71.0	77.3	81.2	88.0	91.6	97.8	100	104	91.3
45	8.48	8.91	9.41	10.3	11.0	12.4	13.4	15.0	15.9	17.4	18.3	19.5	20.2	21.5	22.0	23.0	23.2	23.8	20.9
50	3.68	3.83	3.93	4.17	4.35	4.71	4.97	5.43	5.68	6.02	6.25	6.54	6.69	6.93	7.03	7.22	7.16	7.25	6.64
55	1.83	1.89	1.96	2.05	2.16	2.29	2.46	2.63	2.76	2.89	2.96	3.07	3.14	3.25	3.29	3.36	3.34	3.35	3.13
60	0.82	0.82	0.90	0.93	1.02	1.06	1.17	1.25	1.35	1.39	1.47	1.51	1.59	1.62	1.67	1.69	1.69	1.67	1.57
65	0.03	0.02	0.09	0.10	0.19	0.21	0.30	0.34	0.44	0.48	0.57	0.58	0.67	0.67	0.73	0.72	0.75	0.71	0.64
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.18	0.22	0.16	0.19	0.14	0.16	0.10	0.13	0.07	0.10	0.04	0.08	0.02	0.05	0.00	0.05	0.00	0.05	0.13
135	0.57	0.59	0.53	0.55	0.48	0.50	0.42	0.43	0.36	0.37	0.32	0.33	0.27	0.30	0.24	0.28	0.24	0.28	0.38
140	1.19	1.20	1.14	1.14	1.06	1.06	0.98	0.96	0.88	0.87	0.81	0.80	0.73	0.74	0.69	0.72	0.68	0.71	0.85
145	2.11	2.10	2.04	2.01	1.94	1.90	1.82	1.79	1.70	1.67	1.58	1.56	1.49	1.48	1.43	1.44	1.40	1.43	1.58
150	3.30	3.28	3.22	3.18	3.11	3.05	2.97	2.90	2.81	2.75	2.67	2.63	2.56	2.53	2.48	2.47	2.45	2.46	2.61
155	4.68	4.66	4.60	4.55	4.47	4.40	4.31	4.24	4.15	4.08	4.00	3.94	3.87	3.82	3.78	3.76	3.75	3.74	3.89
160	6.06	6.06	6.00	5.95	5.87	5.81	5.72	5.65	5.57	5.50	5.41	5.36	5.29	5.23	5.19	5.17	5.14	5.14	5.27
165	7.28	7.29	7.21	7.19	7.09	7.05	6.96	6.91	6.82	6.78	6.69	6.66	6.57	6.54	6.48	6.47	6.44	6.45	6.57
170	8.18	8.19	8.11	8.10	8.01	7.99	7.89	7.88	7.78	7.78	7.70	7.67	7.59	7.58	7.52	7.52	7.49	7.54	7.65
175	8.73	8.77	8.70	8.70	8.60	8.61	8.53	8.54	8.45	8.48	8.40	8.41	8.33	8.35	8.28	8.32	8.29	8.36	8.48
180	8.95	8.95	8.91	8.91	8.85	8.85	8.82	8.82	8.80	8.80	8.79	8.79	8.77	8.77	8.75	8.76	8.78	8.83	8.96

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Halo-D18-3000k-RA90-34D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	4395	4388	4386	4381	4378	4375	4372	4369	4366	4365	4360	4359	4355	4354	4349	4349	4344		
5	4198	4188	4159	4148	4116	4102	4067	4054	4019	4007	3978	3971	3944	3941	3920	3924	3909		
10	3464	3452	3400	3389	3341	3323	3268	3247	3190	3174	3119	3112	3064	3068	3031	3051	3030		
15	2531	2525	2466	2449	2388	2371	2308	2288	2224	2203	2141	2131	2083	2081	2045	2064	2042		
20	1696	1688	1641	1625	1572	1550	1489	1467	1411	1390	1340	1319	1276	1267	1241	1250	1241		
25	1040	1028	991	967	923	894	838	804	752	724	678	659	623	618	597	605	601		
30	513	500	468	449	417	396	368	352	331	322	307	304	293	292	286	288	285		
35	252	244	235	223	212	201	189	178	168	159	150	144	137	131	128	125	125		
40	87.0	85.3	79.6	76.3	69.6	65.6	58.9	54.6	48.6	44.7	39.9	37.0	33.1	31.5	29.2	29.0	28.1		
45	20.0	19.6	18.4	17.8	16.4	15.4	13.8	12.8	11.3	10.3	9.23	8.63	7.97	7.70	7.37	7.38	7.30		
50	6.42	6.27	5.96	5.74	5.39	5.18	4.79	4.57	4.19	3.99	3.73	3.62	3.48	3.43	3.34	3.34	3.33		
55	3.05	2.97	2.81	2.72	2.58	2.47	2.34	2.21	2.06	1.92	1.83	1.75	1.72	1.66	1.64	1.63	1.66		
60	1.54	1.45	1.39	1.30	1.25	1.16	1.11	1.01	0.94	0.84	0.82	0.76	0.76	0.70	0.71	0.67	0.70		
65	0.63	0.55	0.52	0.43	0.39	0.30	0.27	0.17	0.16	0.08	0.08	0.00	0.01	0.00	0.00	0.00	0.00		
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
125	0.00	0.01	0.00	0.02	0.00	0.03	0.00	0.04	0.00	0.05	0.01	0.07	0.03	0.08	0.04	0.09	0.05		
130	0.08	0.14	0.10	0.17	0.12	0.18	0.16	0.22	0.18	0.24	0.21	0.27	0.24	0.29	0.25	0.31	0.27		
135	0.36	0.41	0.39	0.44	0.43	0.50	0.48	0.55	0.53	0.59	0.58	0.64	0.62	0.67	0.65	0.69	0.66		
140	0.82	0.89	0.88	0.95	0.95	1.02	1.03	1.10	1.11	1.17	1.17	1.23	1.24	1.29	1.28	1.32	1.30		
145	1.58	1.63	1.66	1.72	1.76	1.83	1.87	1.93	1.97	2.03	2.06	2.12	2.13	2.19	2.19	2.22	2.21		
150	2.63	2.68	2.72	2.79	2.84	2.91	2.98	3.05	3.10	3.16	3.21	3.26	3.29	3.33	3.35	3.37	3.37		
155	3.91	3.96	4.00	4.07	4.13	4.21	4.27	4.35	4.42	4.48	4.52	4.59	4.62	4.67	4.68	4.70	4.70		
160	5.26	5.32	5.35	5.42	5.47	5.55	5.62	5.69	5.75	5.81	5.86	5.92	5.94	6.00	6.01	6.03	6.02		
165	6.54	6.57	6.58	6.66	6.68	6.77	6.80	6.89	6.93	7.00	7.01	7.08	7.09	7.14	7.14	7.18	7.15		
170	7.61	7.63	7.60	7.68	7.67	7.75	7.75	7.84	7.85	7.92	7.91	7.97	7.96	8.02	8.01	8.05	8.02		
175	8.43	8.43	8.38	8.43	8.41	8.48	8.45	8.52	8.49	8.57	8.52	8.58	8.54	8.60	8.58	8.64	8.61		
180	8.93	8.94	8.86	8.86	8.82	8.82	8.81	8.81	8.80	8.80	8.79	8.79	8.77	8.77	8.78	8.79	8.85		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks: