

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P998017

Luminaire Tested: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998017
REPORT IS A COMBINATION OF REPORTS P983754 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D4
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

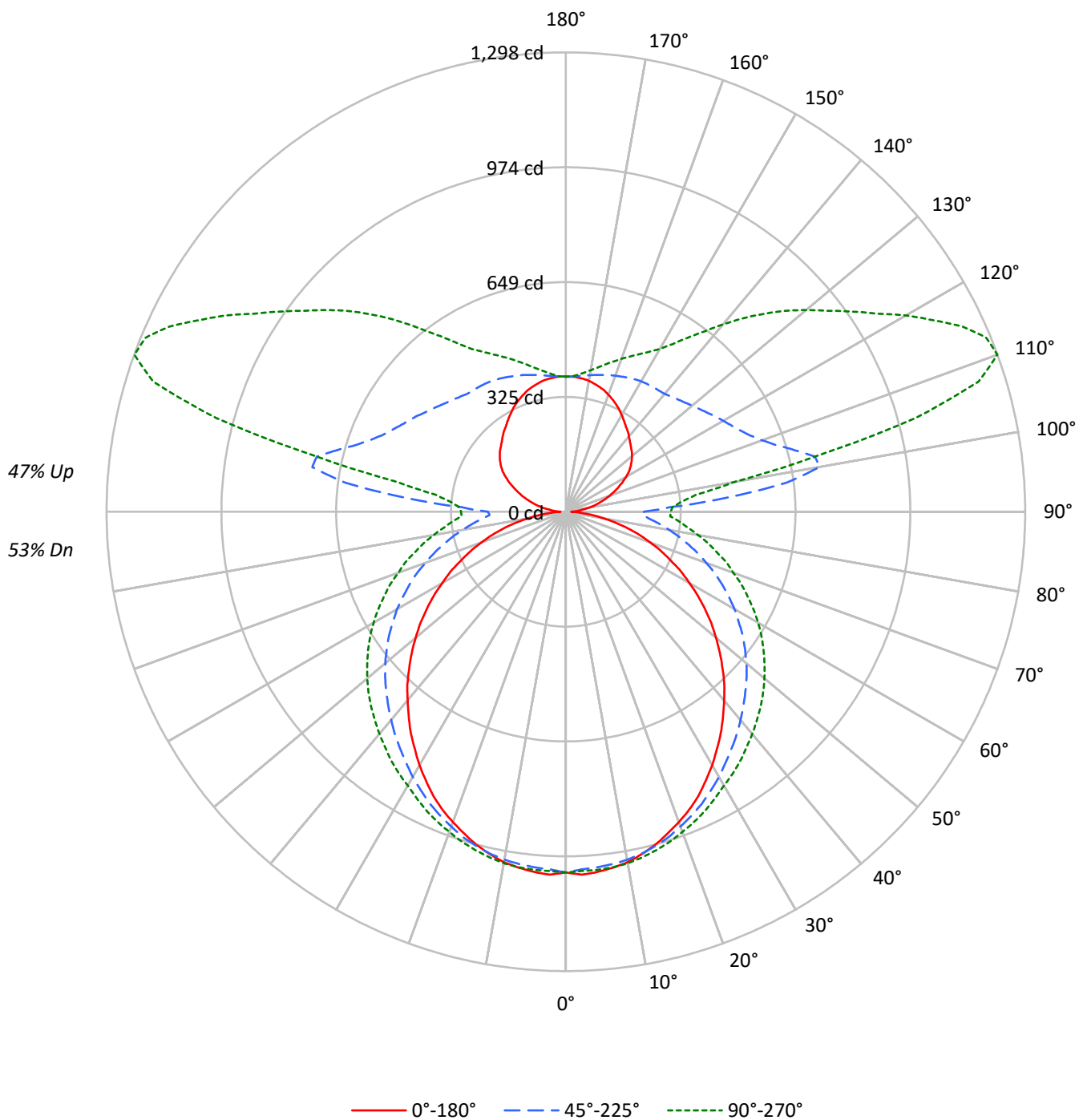
Lumens per Lamp: N/A
Luminaire Lumens: 6552.0 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 82.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P998017

CATALOG NUMBER: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	97	92	87	83	89	85	81	77	72	69	66	60	58	56	49	48	46
2	88	79	72	67	80	73	67	62	62	58	54	52	49	46	42	40	38
3	79	69	61	55	73	64	57	51	54	49	44	45	41	38	37	34	32
4	72	61	52	46	67	56	49	43	48	42	37	40	36	32	33	30	27
5	66	54	45	39	61	50	42	37	43	37	32	36	31	27	29	26	23
6	61	48	40	34	56	45	37	32	38	32	28	32	28	24	27	23	20
7	56	44	35	29	52	40	33	28	35	29	24	29	25	21	24	21	18
8	52	39	31	26	48	37	29	24	32	26	21	27	22	19	22	19	16
9	49	36	28	23	45	34	26	22	29	23	19	25	20	17	20	17	14
10	45	33	25	20	42	31	24	19	27	21	17	23	18	15	19	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16130	16130	16130
5°	16202	15441	15354
10°	16094	14906	14688
15°	15867	14353	14006
20°	15580	13772	13358
25°	15298	13216	12771
30°	14901	12651	12190
35°	14500	12105	11764
40°	14078	11634	11339
45°	13674	11207	10970
50°	13243	10813	10604
55°	12787	10395	10233
60°	12235	9958	9842
65°	11653	9457	9392
70°	11000	8921	8909
75°	10159	8383	8452
80°	8846	7821	7978
85°	7515	7294	7570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13674 cd/sqm

TEST NUMBER: P998017

CATALOG NUMBER: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	1.5
10°-20°	277.0	4.2
20°-30°	419.8	6.4
30°-40°	511.2	7.8
40°-50°	550.0	8.4
50°-60°	534.1	8.2
60°-70°	466.4	7.1
70°-80°	359.0	5.5
80°-90°	242.9	3.7
90°-100°	320.6	4.9
100°-110°	644.3	9.8
110°-120°	629.9	9.6
120°-130°	496.8	7.6
130°-140°	382.1	5.8
140°-150°	277.7	4.2
150°-160°	193.0	2.9
160°-170°	113.6	1.7
170°-180°	37.0	0.6
0°-30°	793.4	12.1
0°-40°	1304.6	19.9
0°-60°	2388.7	36.5
0°-90°	3457.0	52.8
90°-120°	1594.9	24.3
90°-150°	2751.4	42.0
90°-180°	3095.0	47.2
0°-180°	6552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1022	1018	1009	1018	1016	97
15°	975	978	978	991	989	275
25°	886	896	910	927	932	407
35°	764	789	817	849	860	477
45°	626	666	718	764	778	483
55°	480	533	610	663	682	429
65°	328	400	487	548	567	326
75°	182	264	359	422	442	192
85°	53	145	239	301	322	56
90°	16	110	220	278	296	12
95°	38	144	458	335	327	36
105°	97	185	671	1151	1022	104
115°	164	222	544	1072	1238	162
125°	223	264	488	851	987	199
135°	260	310	449	687	791	201
145°	295	339	430	543	601	186
155°	336	362	418	472	491	154
165°	366	377	400	424	431	103
175°	381	381	385	390	388	36
180°	382	382	382	382	382	

TEST NUMBER: P998017

CATALOG NUMBER: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1019.0	1019.0	1019.0	1019.0	1019.0
2.5°	1026.3	1021.9	1011.6	1019.0	1016.0
5°	1021.9	1017.5	1008.6	1017.5	1016.0
7.5°	1014.5	1011.6	1004.2	1014.5	1013.1
10°	1005.7	1002.7	998.3	1010.1	1008.6
12.5°	990.9	992.4	989.4	1001.2	999.8
15°	974.7	977.6	977.6	990.9	989.4
17.5°	954.0	959.9	964.3	977.6	977.6
20°	933.3	940.7	946.6	962.8	962.8
22.5°	911.2	920.0	928.9	945.1	948.1
25°	886.1	896.4	909.7	927.4	931.8
27.5°	856.5	872.8	887.5	909.7	912.6
30°	827.0	846.2	865.4	889.0	893.4
32.5°	794.5	816.6	840.3	868.3	877.2
35°	763.5	788.6	816.6	849.1	859.5
37.5°	729.5	757.6	793.0	828.5	838.8
40°	695.6	728.0	767.9	806.3	819.6
42.5°	663.1	695.6	742.8	785.6	798.9
45°	626.1	666.0	717.7	763.5	778.3
47.5°	590.7	633.5	692.6	739.9	756.1
50°	553.8	599.6	666.0	716.2	732.5
52.5°	518.3	567.1	638.0	689.6	707.4
55°	479.9	533.1	609.9	663.1	682.3
57.5°	443.0	502.1	578.9	636.5	655.7
60°	403.2	466.7	550.8	606.9	627.6
62.5°	367.7	434.2	518.3	578.9	598.1
65°	327.8	400.2	487.3	547.9	567.1
67.5°	292.4	367.7	456.3	516.9	537.5
70°	254.0	330.8	422.4	485.9	503.6
72.5°	218.6	298.3	391.3	453.4	475.5
75°	181.6	264.3	358.9	422.4	441.6
77.5°	146.2	231.9	327.8	391.3	412.0
80°	110.8	200.8	296.8	358.9	379.5
82.5°	81.2	169.8	267.3	329.3	348.5
85°	53.2	144.7	239.2	301.3	321.9
87.5°	32.5	121.1	215.6	276.2	295.4
90°	15.5	110.3	219.9	277.8	295.9
92.5°	24.3	126.4	294.7	291.4	301.8
95°	37.5	144.3	457.6	334.6	327.4
97.5°	48.5	157.1	628.6	432.2	372.1
100°	66.8	167.0	727.7	636.6	481.4
102.5°	82.3	176.5	720.9	924.6	719.1
105°	97.0	185.3	671.0	1151.1	1022.3
107.5°	114.6	194.0	624.0	1225.6	1222.6
110°	130.7	203.2	590.1	1199.8	1297.5

TEST NUMBER: P998017

CATALOG NUMBER: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	146.9	213.0	563.7	1142.0	1285.7
115°	163.7	221.5	543.8	1072.2	1237.9
117.5°	179.9	231.3	527.6	1006.5	1171.7
120°	196.0	240.8	513.6	945.1	1109.3
122.5°	211.4	252.2	501.7	896.2	1041.7
125°	223.2	263.6	487.7	851.0	986.6
127.5°	234.3	275.7	476.6	809.5	932.9
130°	243.8	287.8	466.4	769.0	886.5
132.5°	252.6	299.6	456.7	727.5	840.2
135°	259.9	309.8	448.6	686.8	791.0
137.5°	268.0	318.6	441.3	645.6	741.8
140°	277.5	325.2	434.7	608.1	691.0
142.5°	287.1	331.8	431.7	573.1	641.8
145°	295.1	339.2	430.2	542.9	600.6
147.5°	305.4	345.0	428.0	516.8	561.6
150°	315.7	350.9	425.8	499.2	530.8
152.5°	326.0	356.8	422.1	485.6	509.5
155°	335.5	362.3	417.7	472.4	491.1
157.5°	343.6	366.7	413.3	459.9	475.0
160°	351.7	371.1	408.9	447.4	459.6
162.5°	359.7	374.4	405.2	435.7	444.9
165°	365.6	376.6	400.1	424.4	430.9
167.5°	370.7	378.8	395.7	414.0	417.7
170°	375.9	379.9	392.0	404.5	406.0
172.5°	378.8	381.0	387.6	396.0	396.4
175°	381.0	381.4	384.7	389.5	388.4
177.5°	382.5	381.8	381.8	384.7	382.5
180°	381.8	381.8	381.8	381.8	381.8

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		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	15.12	16.06	16.04	17.00	18.23	18.19	19.13	19.11	20.08	21.31
	3H	16.58	17.43	17.51	18.39	19.64	20.79	21.64	21.72	22.59	23.84
	4H	17.06	17.87	18.01	18.83	20.09	22.04	22.85	22.99	23.81	25.07
	6H	17.35	18.10	18.31	19.06	20.34	23.34	24.09	24.30	25.06	26.33
	8H	17.41	18.13	18.37	19.11	20.38	24.00	24.72	24.97	25.71	26.97
	12H	17.43	18.11	18.40	19.09	20.39	24.73	25.42	25.70	26.39	27.69
4H	2H	16.17	16.98	17.13	17.95	19.20	18.53	19.34	19.48	20.30	21.56
	3H	17.89	18.58	18.85	19.57	20.84	21.33	22.01	22.29	23.00	24.28
	4H	18.51	19.15	19.48	20.13	21.43	22.75	23.38	23.72	24.36	25.66
	6H	18.93	19.48	19.91	20.49	21.78	24.22	24.77	25.20	25.78	27.07
	8H	19.04	19.56	20.03	20.56	21.87	24.98	25.50	25.96	26.50	27.81
	12H	19.09	19.56	20.09	20.58	21.89	25.81	26.28	26.81	27.30	28.61
8H	4H	19.31	19.83	20.29	20.83	22.14	22.90	23.41	23.88	24.42	25.73
	6H	19.95	20.38	20.95	21.42	22.73	24.53	24.97	25.54	26.01	27.31
	8H	20.17	20.56	21.18	21.58	22.91	25.42	25.81	26.44	26.84	28.16
	12H	20.31	20.65	21.33	21.67	23.04	26.42	26.76	27.44	27.79	29.15
12H	4H	19.51	19.98	20.52	21.00	22.32	22.87	23.35	23.88	24.36	25.68
	6H	20.28	20.67	21.30	21.70	23.02	24.55	24.94	25.57	25.97	27.30
	8H	20.59	20.93	21.61	21.96	23.32	25.49	25.83	26.51	26.86	28.22