

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: P998908

Luminaire Tested: SA2XXDIP-B675D725UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998908
REPORT IS A COMBINATION OF REPORTS P984654 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B675D725UB50-4F0-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

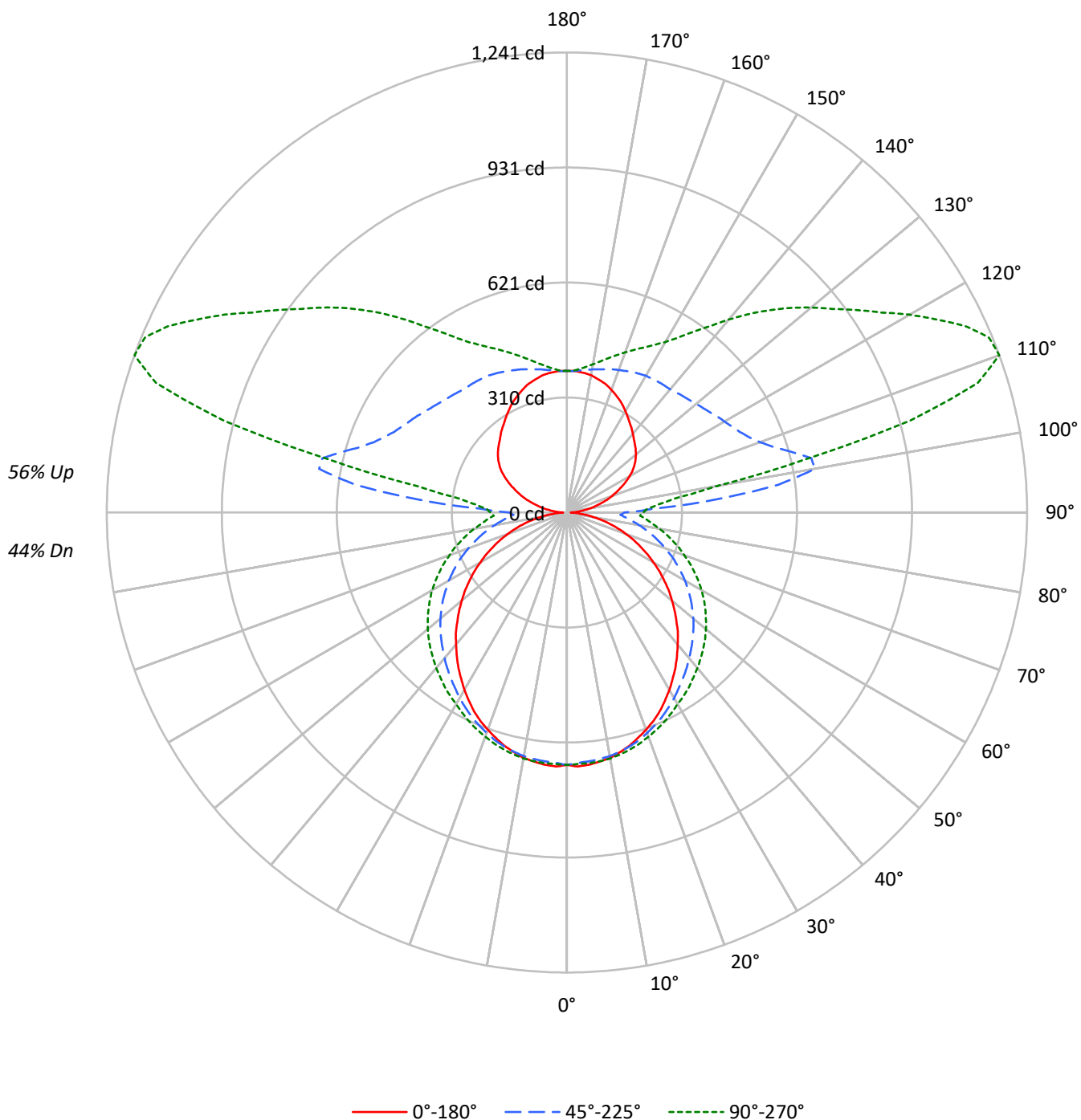
Lumens per Lamp: N/A
Luminaire Lumens: 5262.0 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 57
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

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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	95	90	86	82	87	83	79	75	68	65	63	55	53	51	43	41	40
2	86	78	71	66	78	71	66	61	59	55	51	47	44	42	37	35	33
3	78	68	60	54	71	62	56	50	51	46	42	41	38	35	32	29	27
4	71	60	52	45	65	55	48	42	45	40	36	37	33	29	28	26	23
5	65	53	45	39	59	49	41	36	40	35	30	33	28	25	25	22	20
6	60	48	39	33	54	44	36	31	36	31	26	29	25	22	23	20	17
7	55	43	35	29	50	39	32	27	33	27	23	27	22	19	21	18	15
8	51	39	31	25	47	36	29	24	30	24	20	24	20	17	19	16	14
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	18	15	12
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10778	10778	10778
5°	10827	10318	10260
10°	10754	9961	9815
15°	10602	9592	9359
20°	10410	9202	8927
25°	10222	8832	8535
30°	9957	8454	8146
35°	9689	8089	7860
40°	9407	7774	7577
45°	9138	7489	7329
50°	8848	7225	7085
55°	8545	6945	6838
60°	8175	6655	6577
65°	7789	6319	6275
70°	7349	5960	5953
75°	6791	5601	5646
80°	5908	5226	5331
85°	5015	4876	5058

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9138 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	1.2
10°-20°	185.1	3.5
20°-30°	280.5	5.3
30°-40°	341.6	6.5
40°-50°	367.5	7.0
50°-60°	356.9	6.8
60°-70°	311.7	5.9
70°-80°	239.9	4.6
80°-90°	163.1	3.1
90°-100°	265.6	5.0
100°-110°	604.1	11.5
110°-120°	603.4	11.5
120°-130°	482.0	9.2
130°-140°	375.9	7.1
140°-150°	276.6	5.3
150°-160°	193.0	3.7
160°-170°	113.6	2.2
170°-180°	37.0	0.7
0°-30°	530.2	10.1
0°-40°	871.7	16.6
0°-60°	1596.1	30.3
0°-90°	2310.8	43.9
90°-120°	1473.1	28.0
90°-150°	2607.7	49.6
90°-180°	2951.0	56.1
0°-180°	5262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	683	680	674	680	679	65
15°	651	653	653	662	661	183
25°	592	599	608	620	623	272
35°	510	527	546	567	574	319
45°	418	445	480	510	520	323
55°	321	356	408	443	456	287
65°	219	267	326	366	379	218
75°	121	177	240	282	295	128
85°	36	97	160	201	215	37
90°	11	77	155	194	206	9
95°	34	117	401	260	246	33
105°	94	169	629	1092	958	101
115°	162	214	514	1028	1188	160
125°	222	263	471	821	952	198
135°	259	309	443	671	771	201
145°	295	339	430	540	595	185
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.9	680.9	680.9	680.9	680.9
2.5°	685.8	682.9	675.9	680.9	678.9
5°	682.9	679.9	674.0	679.9	678.9
7.5°	677.9	675.9	671.0	677.9	676.9
10°	672.0	670.0	667.1	675.0	674.0
12.5°	662.1	663.1	661.1	669.0	668.1
15°	651.3	653.3	653.3	662.1	661.1
17.5°	637.5	641.4	644.4	653.3	653.3
20°	623.6	628.6	632.5	643.4	643.4
22.5°	608.8	614.8	620.7	631.5	633.5
25°	592.1	599.0	607.9	619.7	622.7
27.5°	572.3	583.2	593.1	607.9	609.8
30°	552.6	565.4	578.3	594.0	597.0
32.5°	530.9	545.7	561.5	580.2	586.1
35°	510.2	526.9	545.7	567.4	574.3
37.5°	487.5	506.2	529.9	553.6	560.5
40°	464.8	486.5	513.1	538.8	547.7
42.5°	443.1	464.8	496.4	525.0	533.8
45°	418.4	445.0	479.6	510.2	520.0
47.5°	394.7	423.3	462.8	494.4	505.2
50°	370.0	400.6	445.0	478.6	489.4
52.5°	346.4	378.9	426.3	460.8	472.7
55°	320.7	356.2	407.5	443.1	455.9
57.5°	296.0	335.5	386.8	425.3	438.1
60°	269.4	311.8	368.1	405.6	419.4
62.5°	245.7	290.1	346.4	386.8	399.6
65°	219.1	267.4	325.6	366.1	378.9
67.5°	195.4	245.7	304.9	345.4	359.2
70°	169.7	221.0	282.2	324.7	336.5
72.5°	146.0	199.3	261.5	302.9	317.7
75°	121.4	176.6	239.8	282.2	295.0
77.5°	97.7	154.9	219.1	261.5	275.3
80°	74.0	134.2	198.3	239.8	253.6
82.5°	54.3	113.5	178.6	220.1	232.9
85°	35.5	96.7	159.9	201.3	215.1
87.5°	21.7	80.9	144.1	184.5	197.4
90°	10.6	77.0	155.3	193.5	205.8
92.5°	19.9	96.1	234.5	212.0	216.5
95°	33.6	117.4	401.3	259.6	246.5
97.5°	45.1	132.6	575.7	361.2	295.1
100°	63.4	145.4	678.7	569.4	408.8
102.5°	79.3	157.4	675.4	861.4	650.5
105°	94.5	168.7	628.9	1091.8	957.7
107.5°	112.1	179.8	585.3	1170.2	1161.9
110°	128.7	191.4	554.3	1148.3	1240.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	144.9	203.2	531.3	1094.0	1232.3
115°	161.7	214.1	514.4	1028.1	1188.4
117.5°	178.5	226.0	501.6	965.8	1126.2
120°	194.6	237.4	490.6	908.4	1067.2
122.5°	210.0	250.2	481.7	862.9	1004.0
125°	222.2	262.6	471.1	821.2	952.3
127.5°	233.3	275.2	462.9	783.5	902.5
130°	242.8	287.3	455.6	746.5	860.1
132.5°	251.6	299.0	448.9	708.4	817.2
135°	259.4	309.4	443.3	671.1	771.4
137.5°	267.5	318.2	438.3	633.4	726.1
140°	277.0	325.2	433.7	599.2	679.3
142.5°	286.6	331.8	431.7	567.2	633.5
145°	295.1	339.2	430.2	539.9	595.3
147.5°	305.4	345.0	428.0	516.4	559.6
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	12.89	13.74	13.88	14.75	16.11	15.96	16.81	16.96	17.83	19.18
	3H	14.35	15.12	15.35	16.14	17.51	18.55	19.32	19.56	20.34	21.72
	4H	14.82	15.55	15.84	16.58	17.96	19.80	20.54	20.82	21.56	22.94
	6H	15.11	15.78	16.14	16.81	18.21	21.10	21.78	22.13	22.81	24.20
	8H	15.16	15.81	16.20	16.86	18.25	21.76	22.41	22.79	23.45	24.84
	12H	15.18	15.80	16.22	16.84	18.25	22.48	23.10	23.52	24.14	25.56
4H	2H	13.94	14.67	14.96	15.70	17.07	16.29	17.02	17.32	18.05	19.43
	3H	15.64	16.26	16.68	17.32	18.71	19.08	19.70	20.12	20.76	22.15
	4H	16.26	16.84	17.31	17.88	19.30	20.50	21.07	21.54	22.12	23.53
	6H	16.68	17.18	17.73	18.25	19.65	21.97	22.46	23.02	23.53	24.94
	8H	16.79	17.25	17.84	18.32	19.74	22.72	23.19	23.77	24.25	25.68
	12H	16.83	17.26	17.90	18.33	19.76	23.55	23.98	24.62	25.05	26.48
8H	4H	17.05	17.52	18.11	18.58	20.01	20.64	21.11	21.69	22.17	23.59
	6H	17.69	18.08	18.76	19.18	20.60	22.27	22.66	23.34	23.76	25.19
	8H	17.91	18.26	18.99	19.34	20.78	23.16	23.51	24.24	24.59	26.03
	12H	18.04	18.35	19.13	19.43	20.91	24.15	24.46	25.24	25.54	27.02
12H	4H	17.25	17.68	18.32	18.75	20.18	20.62	21.04	21.68	22.12	23.55
	6H	18.02	18.37	19.10	19.45	20.89	22.30	22.64	23.38	23.73	25.17
	8H	18.32	18.63	19.41	19.71	21.19	23.22	23.53	24.31	24.61	26.09