

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: P998823

Luminaire Tested: SA2XXDIP-B675D530UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998823
REPORT IS A COMBINATION OF REPORTS P984569 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B675D530UB30-4F0-XX-W2A-F1
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

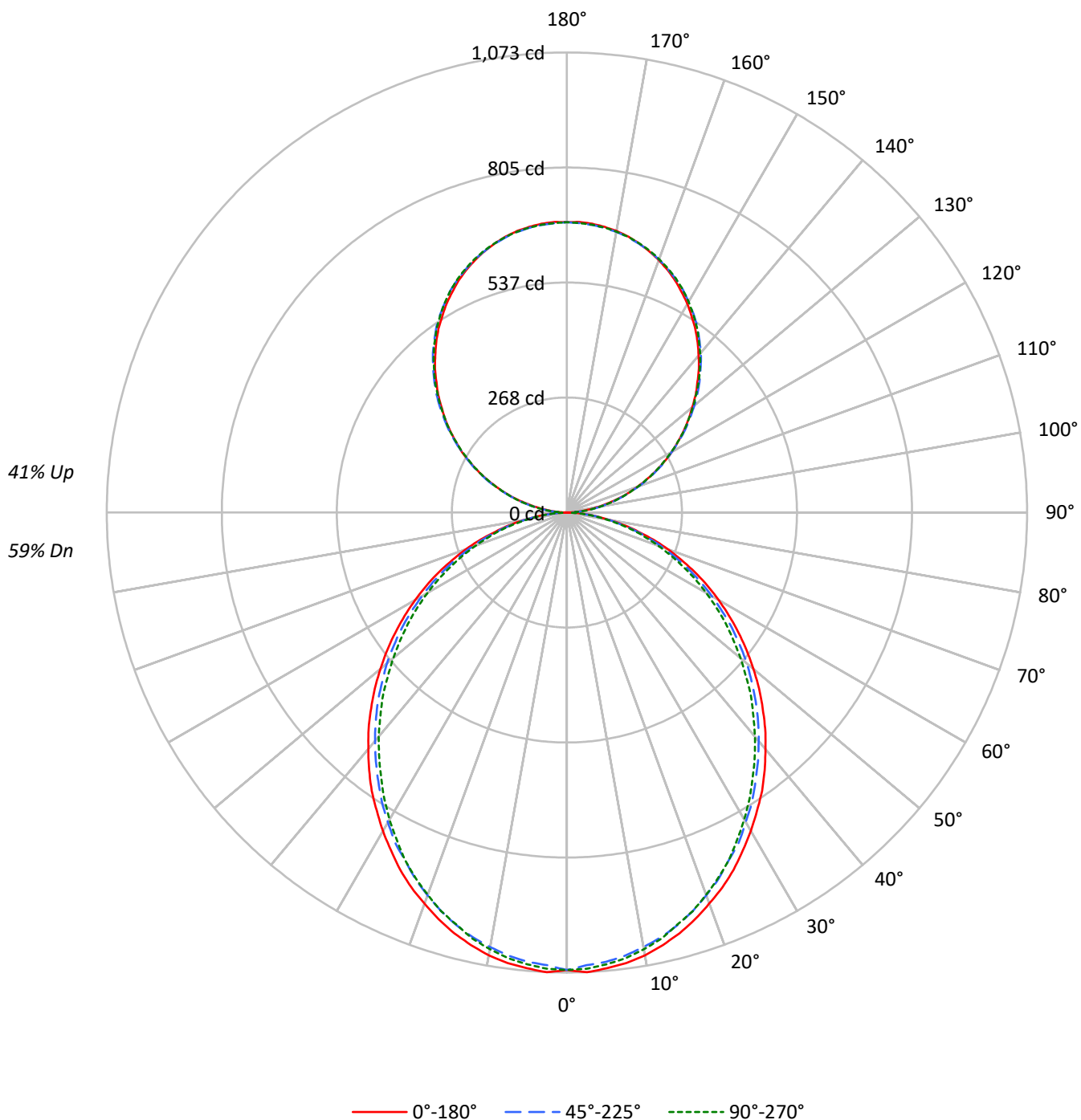
Lumens per Lamp: N/A
Luminaire Lumens: 4610.0 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	100	95	91	88	93	89	86	83	77	75	73	67	65	63	57	56	54
2	91	83	77	72	85	78	72	68	68	64	60	59	56	53	50	48	46
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	44	41	39
4	76	65	57	51	71	61	54	48	53	48	43	46	42	38	40	36	34
5	70	58	50	44	65	54	47	41	48	42	37	42	37	33	36	32	29
6	64	52	44	38	60	49	41	36	43	37	33	38	33	29	32	29	26
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	30	26	23
8	55	43	35	29	51	40	33	28	36	30	26	31	27	23	27	23	21
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16891	16891	16891
5°	16919	16102	15987
10°	16782	15368	15062
15°	16536	14627	14090
20°	16204	13824	13168
25°	15873	12984	12249
30°	15456	12195	11284
35°	15064	11362	10336
40°	14578	10541	9441
45°	14096	9725	8563
50°	13569	8896	7650
55°	13014	8010	6787
60°	12393	7049	5890
65°	11710	6075	4946
70°	10844	5005	3993
75°	9644	3859	3084
80°	8191	2622	1985
85°	5947	1220	844

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14096 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	2.2
10°-20°	282.6	6.1
20°-30°	415.3	9.0
30°-40°	482.3	10.5
40°-50°	481.7	10.4
50°-60°	420.0	9.1
60°-70°	310.5	6.7
70°-80°	175.7	3.8
80°-90°	48.3	1.0
90°-100°	41.9	0.9
100°-110°	133.2	2.9
110°-120°	227.8	4.9
120°-130°	299.7	6.5
130°-140°	336.4	7.3
140°-150°	329.9	7.2
150°-160°	276.7	6.0
160°-170°	183.5	4.0
170°-180°	64.1	1.4
0°-30°	798.3	17.3
0°-40°	1280.6	27.8
0°-60°	2182.4	47.3
0°-90°	2716.9	58.9
90°-120°	402.9	8.7
90°-150°	1368.8	29.7
90°-180°	1893.0	41.1
0°-180°	4610.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1067	1063	1052	1060	1058	101
15°	1016	1010	996	1000	995	286
25°	919	911	894	896	894	423
35°	793	783	766	760	755	495
45°	645	638	623	612	608	498
55°	488	482	470	458	452	437
65°	329	323	313	304	299	326
75°	172	170	165	159	161	184
85°	42	41	40	37	36	47
90°	1	7	20	19	19	4
95°	30	35	37	37	35	33
105°	123	125	126	127	127	130
115°	229	232	231	230	229	226
125°	333	338	336	334	334	297
135°	430	437	438	437	435	332
145°	522	526	530	530	528	326
155°	597	599	600	603	602	275
165°	650	649	649	653	650	183
175°	676	674	673	677	674	64
180°	677	677	677	677	677	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.1	1067.1	1067.1	1067.1	1067.1
2.5°	1073.3	1068.2	1056.9	1067.1	1065.1
5°	1067.1	1063.0	1051.8	1060.0	1057.9
7.5°	1060.0	1053.8	1042.5	1050.7	1048.7
10°	1048.7	1041.5	1029.2	1037.4	1034.3
12.5°	1033.3	1027.1	1014.8	1019.9	1017.9
15°	1015.8	1009.7	996.3	1000.5	995.3
17.5°	994.3	988.1	974.8	979.9	974.8
20°	970.7	964.5	950.2	953.3	949.1
22.5°	947.1	937.9	924.5	924.5	922.5
25°	919.4	911.2	893.7	895.8	893.7
27.5°	888.6	881.4	868.1	865.0	859.9
30°	857.8	849.6	834.2	831.1	827.0
32.5°	825.0	818.8	802.4	796.3	792.2
35°	793.2	782.9	766.5	760.3	755.2
37.5°	757.3	748.0	731.6	724.4	719.3
40°	720.3	712.1	695.7	686.5	682.4
42.5°	684.4	676.2	659.8	649.5	643.4
45°	645.4	638.2	622.8	611.6	607.5
47.5°	607.5	600.3	583.9	572.6	566.4
50°	567.4	562.3	547.9	533.6	528.4
52.5°	528.4	521.3	507.9	496.6	489.5
55°	488.4	482.3	470.0	457.6	452.5
57.5°	448.4	443.3	429.9	417.6	413.5
60°	408.4	404.3	389.9	378.6	375.6
62.5°	369.4	362.2	352.0	341.7	337.6
65°	329.4	323.2	313.0	303.7	298.6
67.5°	288.3	283.2	274.0	266.8	262.7
70°	250.4	246.3	237.0	229.8	225.7
72.5°	211.4	207.3	202.1	195.0	191.9
75°	172.4	170.3	165.2	159.0	161.1
77.5°	137.5	133.4	131.3	128.3	125.2
80°	102.6	101.6	99.5	96.5	94.4
82.5°	69.8	69.8	68.7	64.6	64.6
85°	42.1	41.0	40.0	36.9	35.9
87.5°	18.5	16.4	14.4	11.3	10.3
90°	0.6	7.4	20.0	18.9	19.4
92.5°	12.6	17.1	17.7	18.3	18.3
95°	29.7	35.4	36.6	36.6	35.4
97.5°	49.7	54.9	57.1	57.1	57.1
100°	72.6	77.1	78.9	78.9	78.3
102.5°	96.6	100.0	102.3	102.9	102.3
105°	122.9	124.6	125.7	126.9	126.9
107.5°	149.1	151.4	151.4	152.0	149.1
110°	174.3	177.7	177.7	177.7	176.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	201.7	205.1	204.6	202.8	201.7
115°	228.6	232.0	230.8	230.3	228.6
117.5°	255.4	260.0	257.1	255.4	253.7
120°	282.3	286.8	282.3	282.3	280.6
122.5°	306.8	312.6	309.7	308.0	306.8
125°	332.6	337.7	336.0	334.3	333.7
127.5°	357.7	364.0	361.7	359.4	357.7
130°	381.1	388.6	387.4	386.3	384.0
132.5°	407.4	413.1	413.7	410.8	409.1
135°	430.3	436.6	437.7	437.1	435.4
137.5°	455.4	460.5	461.7	461.1	458.8
140°	477.7	482.8	485.7	485.7	483.4
142.5°	500.5	505.7	507.4	508.0	505.7
145°	522.3	526.3	529.7	530.3	528.0
147.5°	541.7	546.8	549.1	550.3	548.0
150°	561.7	565.1	567.4	569.1	567.4
152.5°	579.4	582.8	585.7	588.0	585.7
155°	597.1	598.8	600.5	603.4	601.7
157.5°	612.5	613.7	614.8	618.8	616.0
160°	626.3	627.4	628.0	631.4	629.1
162.5°	638.8	638.8	639.4	643.4	640.5
165°	649.7	649.1	649.1	653.1	650.3
167.5°	659.4	657.7	657.7	661.7	658.8
170°	666.8	665.1	664.5	668.5	665.1
172.5°	672.0	670.3	669.7	673.7	670.3
175°	676.0	674.3	673.1	677.1	673.7
177.5°	678.3	676.5	675.4	678.8	675.4
180°	677.1	677.1	677.1	677.1	677.1

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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	15.84	16.79	16.72	17.69	18.83	16.62	17.57	17.50	18.47	19.61
	3H	17.19	18.04	18.08	18.94	20.11	18.26	19.11	19.15	20.01	21.18
	4H	17.60	18.40	18.50	19.31	20.49	18.85	19.66	19.76	20.57	21.74
	6H	17.82	18.56	18.74	19.48	20.67	19.26	20.00	20.18	20.92	22.11
	8H	17.85	18.56	18.78	19.49	20.68	19.37	20.08	20.30	21.01	22.20
	12H	17.85	18.52	18.78	19.45	20.66	19.42	20.09	20.35	21.02	22.23
4H	2H	16.32	17.13	17.23	18.04	19.21	16.97	17.77	17.87	18.68	19.86
	3H	17.85	18.52	18.77	19.46	20.65	18.75	19.42	19.67	20.37	21.56
	4H	18.36	18.97	19.29	19.91	21.12	19.44	20.05	20.37	20.99	22.20
	6H	18.66	19.19	19.61	20.16	21.37	19.94	20.47	20.88	21.43	22.64
	8H	18.72	19.22	19.67	20.17	21.40	20.08	20.58	21.03	21.53	22.76
	12H	18.73	19.17	19.69	20.15	21.38	20.15	20.60	21.12	21.57	22.80
8H	4H	18.54	19.03	19.49	19.99	21.22	19.53	20.02	20.48	20.98	22.21
	6H	18.93	19.34	19.90	20.33	21.56	20.10	20.51	21.08	21.51	22.74
	8H	19.03	19.39	20.01	20.38	21.62	20.29	20.65	21.27	21.64	22.89
	12H	19.07	19.38	20.05	20.36	21.66	20.40	20.71	21.38	21.69	22.99
12H	4H	18.53	18.97	19.49	19.95	21.18	19.50	19.94	20.46	20.92	22.15
	6H	18.94	19.31	19.93	20.29	21.54	20.10	20.46	21.08	21.45	22.69
	8H	19.06	19.38	20.05	20.36	21.65	20.30	20.61	21.28	21.60	22.89