

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: P998696

Luminaire Tested: SA2XXDIP-B675D1080UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998696
REPORT IS A COMBINATION OF REPORTS P984439 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B675D1080UB2750-4F0-XX-W2A-F_3500K
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

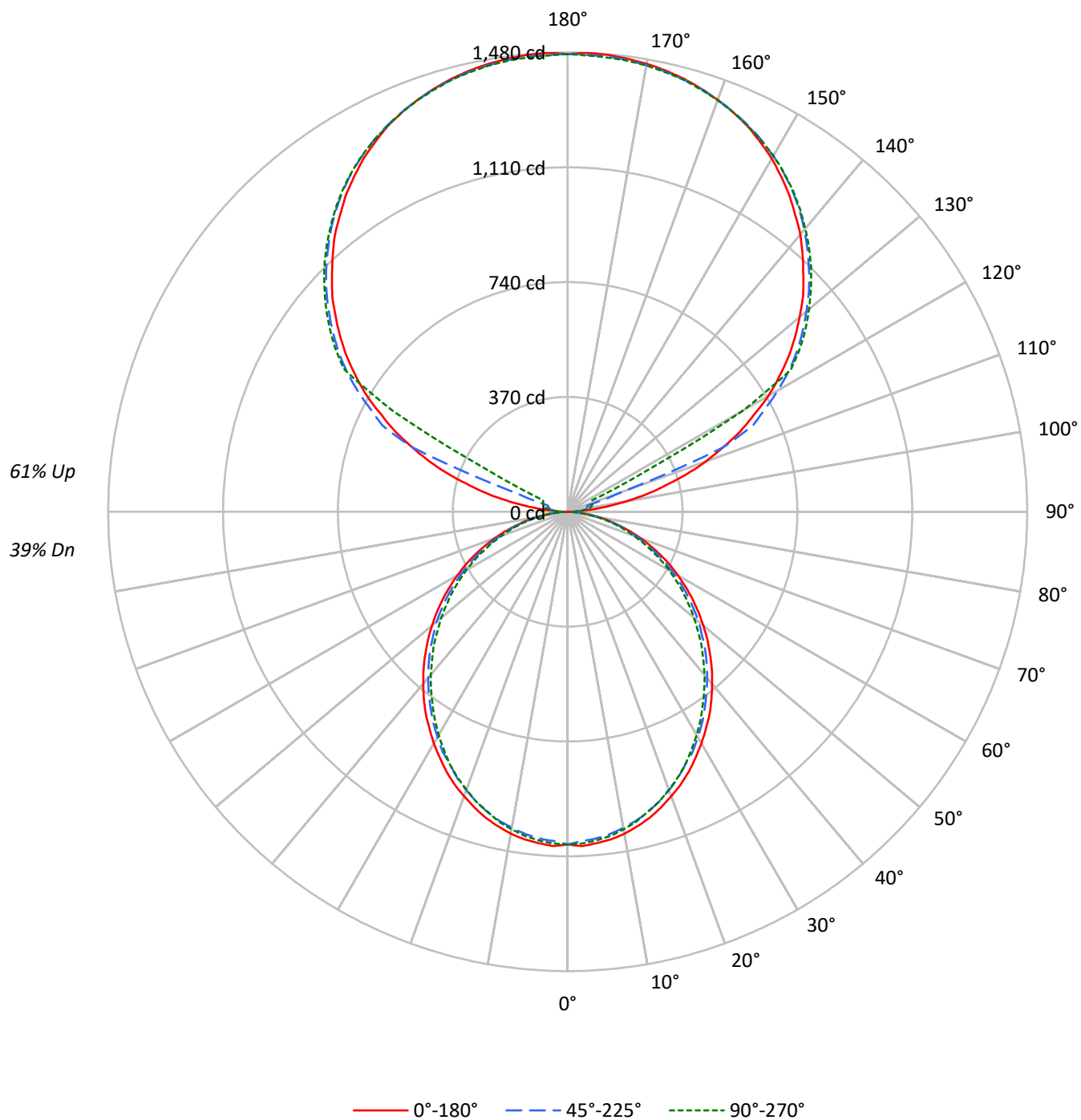
Lumens per Lamp: N/A
Luminaire Lumens: 7052.0 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 70.9
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	86	83	80	77	67	65	63	53	52	51	40	39	39
2	87	79	73	68	79	72	67	63	59	55	52	47	44	42	36	34	33
3	79	70	63	57	72	64	57	52	52	48	44	41	38	36	32	29	28
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	37	31	51	41	34	29	34	28	25	27	23	20	21	18	16
8	52	40	33	27	47	37	30	25	31	25	22	25	21	18	19	17	15
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13
10	45	34	26	22	41	31	25	20	26	21	17	21	17	15	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16967	16967	16967
5°	16995	16172	16058
10°	16856	15435	15129
15°	16609	14694	14152
20°	16276	13886	13227
25°	15944	13042	12304
30°	15524	12249	11334
35°	15131	11412	10383
40°	14643	10587	9482
45°	14159	9769	8599
50°	13628	8936	7684
55°	13073	8044	6817
60°	12447	7080	5915
65°	11760	6100	4967
70°	10892	5029	4010
75°	9683	3875	3097
80°	8231	2635	1993
85°	5975	1226	849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14159 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.4
10°-20°	283.8	4.0
20°-30°	417.1	5.9
30°-40°	484.5	6.9
40°-50°	483.9	6.9
50°-60°	421.9	6.0
60°-70°	311.9	4.4
70°-80°	176.5	2.5
80°-90°	49.2	0.7
90°-100°	48.6	0.7
100°-110°	181.2	2.6
110°-120°	480.7	6.8
120°-130°	797.2	11.3
130°-140°	846.8	12.0
140°-150°	787.0	11.2
150°-160°	632.7	9.0
160°-170°	407.7	5.8
170°-180°	140.3	2.0
0°-30°	801.8	11.4
0°-40°	1286.3	18.2
0°-60°	2192.1	31.1
0°-90°	2729.6	38.7
90°-120°	710.5	10.1
90°-150°	3141.6	44.5
90°-180°	4322.0	61.3
0°-180°	7052.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1072	1068	1056	1065	1063	102
15°	1020	1014	1001	1005	1000	287
25°	924	915	898	900	898	425
35°	797	786	770	764	759	497
45°	648	641	626	614	610	500
55°	491	484	472	460	454	439
65°	331	325	314	305	300	327
75°	173	171	166	160	162	185
85°	42	41	40	37	36	47
90°	1	13	21	27	29	7
95°	69	34	42	47	46	82
105°	324	356	65	77	81	347
115°	613	632	658	164	88	604
125°	867	881	902	909	912	774
135°	1073	1090	1100	1111	1108	829
145°	1245	1244	1262	1270	1264	779
155°	1371	1361	1374	1380	1372	632
165°	1444	1438	1441	1449	1441	408
175°	1478	1470	1472	1480	1469	141
180°	1474	1474	1474	1474	1474	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.9	1071.9	1071.9	1071.9	1071.9
2.5°	1078.1	1072.9	1061.6	1071.9	1069.8
5°	1071.9	1067.7	1056.4	1064.7	1062.6
7.5°	1064.7	1058.5	1047.1	1055.4	1053.3
10°	1053.3	1046.1	1033.7	1042.0	1038.9
12.5°	1037.9	1031.7	1019.3	1024.5	1022.4
15°	1020.3	1014.2	1000.8	1004.9	999.7
17.5°	998.7	992.5	979.1	984.3	979.1
20°	975.0	968.8	954.4	957.5	953.3
22.5°	951.3	942.0	928.6	928.6	926.5
25°	923.5	915.2	897.7	899.7	897.7
27.5°	892.5	885.3	871.9	868.8	863.7
30°	861.6	853.4	837.9	834.8	830.7
32.5°	828.6	822.5	806.0	799.8	795.7
35°	796.7	786.4	769.9	763.7	758.6
37.5°	760.6	751.3	734.8	727.6	722.5
40°	723.5	715.3	698.8	689.5	685.4
42.5°	687.4	679.2	662.7	652.4	646.2
45°	648.3	641.1	625.6	614.3	610.1
47.5°	610.1	602.9	586.4	575.1	568.9
50°	569.9	564.8	550.4	535.9	530.8
52.5°	530.8	523.6	510.2	498.8	491.6
55°	490.6	484.4	472.0	459.7	454.5
57.5°	450.4	445.2	431.8	419.5	415.3
60°	410.2	406.1	391.6	380.3	377.2
62.5°	371.0	363.8	353.5	343.2	339.1
65°	330.8	324.7	314.3	305.1	299.9
67.5°	289.6	284.5	275.2	268.0	263.8
70°	251.5	247.4	238.1	230.9	226.7
72.5°	212.3	208.2	203.0	195.8	192.7
75°	173.1	171.1	165.9	159.7	161.8
77.5°	138.1	134.0	131.9	128.8	125.7
80°	103.1	102.0	100.0	96.9	94.8
82.5°	70.1	70.1	69.1	64.9	64.9
85°	42.3	41.2	40.2	37.1	36.1
87.5°	18.6	16.5	14.4	11.3	10.3
90°	1.1	12.8	21.3	26.7	28.8
92.5°	26.7	22.4	25.6	27.7	28.8
95°	69.3	34.1	41.6	46.9	45.9
97.5°	124.8	37.3	54.4	57.6	58.7
100°	188.8	42.7	60.8	69.3	71.5
102.5°	259.2	257.1	62.9	74.7	77.9
105°	324.3	356.3	65.1	76.8	81.1
107.5°	400.1	426.7	67.2	78.9	83.2
110°	472.6	495.0	186.7	80.0	84.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	540.9	560.1	542.0	82.1	85.3
115°	613.4	631.6	658.2	164.3	87.5
117.5°	676.4	697.7	715.9	563.3	283.8
120°	746.8	762.8	782.0	794.8	650.8
122.5°	806.5	823.6	844.9	851.4	852.4
125°	867.4	881.2	901.5	909.0	912.2
127.5°	922.8	937.8	953.8	964.4	965.5
130°	975.1	992.2	1003.9	1015.6	1014.6
132.5°	1028.4	1042.3	1054.1	1063.7	1062.6
135°	1073.3	1090.3	1099.9	1110.6	1108.5
137.5°	1120.2	1133.0	1143.7	1154.3	1151.1
140°	1166.1	1174.6	1186.3	1195.9	1190.6
142.5°	1204.5	1211.9	1225.8	1234.4	1229.0
145°	1245.0	1244.0	1262.1	1269.6	1264.2
147.5°	1280.2	1277.0	1295.2	1300.5	1296.2
150°	1314.4	1306.9	1324.0	1330.4	1325.0
152.5°	1343.2	1334.6	1350.6	1357.0	1349.6
155°	1370.9	1361.3	1374.1	1380.5	1372.0
157.5°	1393.3	1384.8	1394.4	1401.8	1393.3
160°	1412.5	1406.1	1412.5	1418.9	1411.4
162.5°	1429.6	1423.2	1428.5	1436.0	1426.4
165°	1444.5	1438.1	1441.3	1448.8	1441.3
167.5°	1456.3	1449.9	1453.1	1460.5	1450.9
170°	1465.9	1459.5	1461.6	1469.1	1459.5
172.5°	1472.3	1465.9	1468.0	1475.5	1465.9
175°	1477.6	1470.1	1472.3	1479.7	1469.1
177.5°	1479.7	1472.3	1473.3	1480.8	1471.2
180°	1474.4	1474.4	1474.4	1474.4	1474.4

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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	13.93	14.70	14.98	15.75	17.17	14.71	15.48	15.76	16.53	17.96
	3H	15.26	15.95	16.32	17.01	18.45	16.33	17.02	17.39	18.08	19.52
	4H	15.66	16.31	16.73	17.38	18.83	16.92	17.57	17.99	18.63	20.08
	6H	15.87	16.48	16.95	17.54	19.00	17.32	17.92	18.40	18.98	20.45
	8H	15.90	16.47	16.99	17.56	19.01	17.42	17.99	18.51	19.08	20.53
	12H	15.89	16.43	16.98	17.51	18.99	17.46	18.01	18.55	19.08	20.56
4H	2H	14.39	15.04	15.46	16.10	17.55	15.03	15.68	16.11	16.75	18.20
	3H	15.90	16.44	16.98	17.53	18.99	16.80	17.35	17.89	18.44	19.90
	4H	16.40	16.90	17.49	17.98	19.46	17.48	17.98	18.57	19.06	20.54
	6H	16.70	17.12	17.79	18.23	19.71	17.97	18.40	19.07	19.50	20.98
	8H	16.75	17.15	17.85	18.25	19.74	18.11	18.51	19.21	19.61	21.10
	12H	16.75	17.11	17.86	18.22	19.72	18.17	18.53	19.28	19.64	21.14
8H	4H	16.57	16.97	17.66	18.06	19.56	17.56	17.96	18.66	19.06	20.55
	6H	16.95	17.28	18.06	18.42	19.91	18.12	18.45	19.24	19.59	21.08
	8H	17.05	17.34	18.17	18.46	19.97	18.31	18.60	19.44	19.72	21.23
	12H	17.07	17.33	18.20	18.45	19.99	18.40	18.66	19.53	19.78	21.32
12H	4H	16.54	16.91	17.66	18.02	19.51	17.52	17.88	18.63	18.99	20.49
	6H	16.96	17.25	18.09	18.37	19.88	18.11	18.40	19.24	19.52	21.03
	8H	17.07	17.33	18.20	18.44	19.99	18.30	18.56	19.43	19.68	21.22