

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: P998716

Luminaire Tested: SA2XXDIP-B675D1080UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998716
REPORT IS A COMBINATION OF REPORTS P984459 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B675D1080UB35-4F0-XX-W2A-F4
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

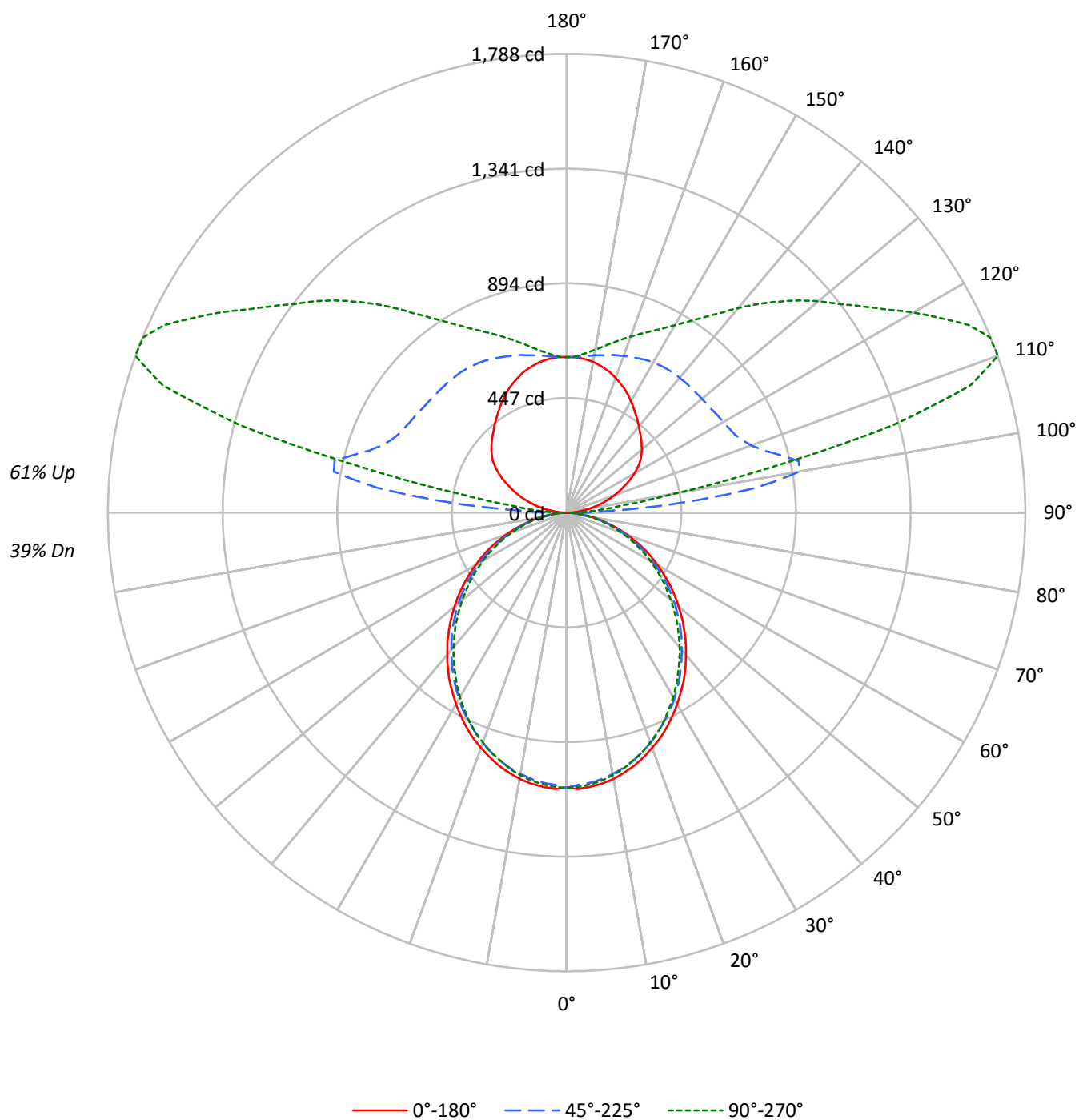
Lumens per Lamp: N/A
Luminaire Lumens: 6957.9 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	91	87	84	87	83	80	77	68	65	63	54	52	51	41	40	39
2	87	80	74	68	79	73	67	63	59	56	52	47	45	42	36	34	33
3	79	70	63	57	72	64	58	53	52	48	44	42	39	36	32	30	28
4	72	62	54	48	66	56	50	45	46	41	38	37	34	31	28	26	24
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	21	18
7	56	44	37	31	51	41	34	29	34	29	25	27	23	21	21	18	16
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13
10	45	34	26	22	41	31	25	20	26	21	18	21	17	15	17	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	4.1
20°-30°	417.1	6.0
30°-40°	484.5	7.0
40°-50°	483.9	7.0
50°-60°	421.9	6.1
60°-70°	311.9	4.5
70°-80°	176.5	2.5
80°-90°	50.4	0.7
90°-100°	245.8	3.5
100°-110°	830.9	11.9
110°-120°	873.4	12.6
120°-130°	718.2	10.3
130°-140°	577.1	8.3
140°-150°	436.0	6.3
150°-160°	306.5	4.4
160°-170°	180.5	2.6
170°-180°	58.7	0.8
0°-30°	801.8	11.5
0°-40°	1286.3	18.5
0°-60°	2192.1	31.5
0°-90°	2730.9	39.2
90°-120°	1950.0	28.0
90°-150°	3681.3	52.9
90°-180°	4227.0	60.8
0°-180°	6957.9	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	16	40	38	38	5
95°	41	100	457	173	133	42
105°	142	215	864	1544	1314	151
115°	251	317	723	1492	1729	249
125°	350	414	695	1208	1403	311
135°	410	490	687	1016	1162	317
145°	469	539	683	848	928	294
155°	533	575	663	750	780	245
165°	581	598	635	674	684	164
175°	605	606	611	618	617	57
180°	606	606	606	606	606	

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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°	1.2	15.8	39.6	37.9	38.5
92.5°	17.5	55.4	179.6	82.8	71.1
95°	40.8	100.3	457.0	172.6	132.9
97.5°	60.6	132.4	745.0	346.3	222.7
100°	89.8	162.0	921.1	689.7	417.4
102.5°	116.6	188.9	926.9	1165.9	813.8
105°	142.2	214.6	863.9	1544.2	1314.0
107.5°	170.2	240.2	805.6	1681.2	1650.9
110°	198.2	266.4	766.0	1659.1	1788.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.9	291.5	740.4	1583.8	1786.2
115°	250.7	316.6	722.9	1491.8	1729.0
117.5°	278.7	341.6	713.5	1403.8	1642.8
120°	304.3	366.1	705.4	1325.0	1560.0
122.5°	328.8	391.2	700.7	1263.8	1473.7
125°	349.8	413.9	694.9	1208.4	1402.6
127.5°	367.3	435.5	691.4	1161.2	1336.1
130°	382.4	454.7	689.1	1113.4	1281.3
132.5°	396.4	473.4	687.9	1063.9	1224.2
135°	410.4	489.7	686.7	1015.6	1162.4
137.5°	423.2	503.6	686.7	966.6	1103.0
140°	438.4	516.5	685.6	923.4	1041.2
142.5°	453.5	527.0	685.6	882.0	979.4
145°	468.7	538.6	683.2	848.2	928.1
147.5°	485.0	548.0	679.7	818.4	882.6
150°	501.3	557.3	676.2	792.8	843.0
152.5°	517.7	566.6	670.4	771.2	809.1
155°	532.8	575.4	663.4	750.3	780.0
157.5°	545.6	582.4	656.4	730.4	754.3
160°	558.5	589.4	649.4	710.6	729.9
162.5°	571.3	594.6	643.6	692.0	706.5
165°	580.6	598.1	635.4	673.9	684.4
167.5°	588.8	601.6	628.4	657.6	663.4
170°	596.9	603.4	622.6	642.4	644.7
172.5°	601.6	605.1	615.6	629.0	629.6
175°	605.1	605.7	610.9	618.5	616.8
177.5°	607.4	606.3	606.3	610.9	607.4
180°	606.3	606.3	606.3	606.3	606.3

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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	13.99	14.76	15.03	15.81	17.23	14.77	15.54	15.81	16.59	18.01
	3H	15.32	16.01	16.37	17.07	18.50	16.39	17.08	17.44	18.14	19.58
	4H	15.72	16.38	16.78	17.44	18.88	16.98	17.63	18.04	18.69	20.14
	6H	15.93	16.54	17.01	17.60	19.06	17.38	17.98	18.45	19.04	20.50
	8H	15.96	16.54	17.04	17.62	19.07	17.48	18.06	18.56	19.14	20.59
	12H	15.95	16.50	17.03	17.57	19.04	17.52	18.07	18.61	19.14	20.62
4H	2H	14.45	15.10	15.52	16.16	17.60	15.09	15.75	16.16	16.81	18.25
	3H	15.95	16.50	17.03	17.59	19.05	16.86	17.41	17.94	18.50	19.95
	4H	16.46	16.96	17.54	18.04	19.51	17.54	18.04	18.62	19.12	20.60
	6H	16.75	17.19	17.85	18.29	19.76	18.03	18.46	19.12	19.56	21.03
	8H	16.81	17.21	17.90	18.31	19.79	18.17	18.57	19.26	19.67	21.15
	12H	16.81	17.17	17.92	18.28	19.77	18.23	18.59	19.34	19.70	21.19
8H	4H	16.63	17.03	17.72	18.12	19.61	17.62	18.02	18.71	19.11	20.60
	6H	17.01	17.34	18.12	18.47	19.96	18.18	18.52	19.30	19.65	21.13
	8H	17.11	17.40	18.23	18.52	20.02	18.37	18.66	19.49	19.78	21.28
	12H	17.13	17.39	18.26	18.50	20.05	18.46	18.72	19.59	19.83	21.37
12H	4H	16.60	16.97	17.71	18.08	19.57	17.58	17.94	18.69	19.05	20.54
	6H	17.02	17.31	18.14	18.43	19.93	18.17	18.47	19.30	19.58	21.09
	8H	17.13	17.39	18.26	18.50	20.04	18.36	18.62	19.49	19.73	21.28