

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: P998726

Luminaire Tested: SA2XXDIP-B675D1080UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998726
REPORT IS A COMBINATION OF REPORTS P984472 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B675D1080UB50-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

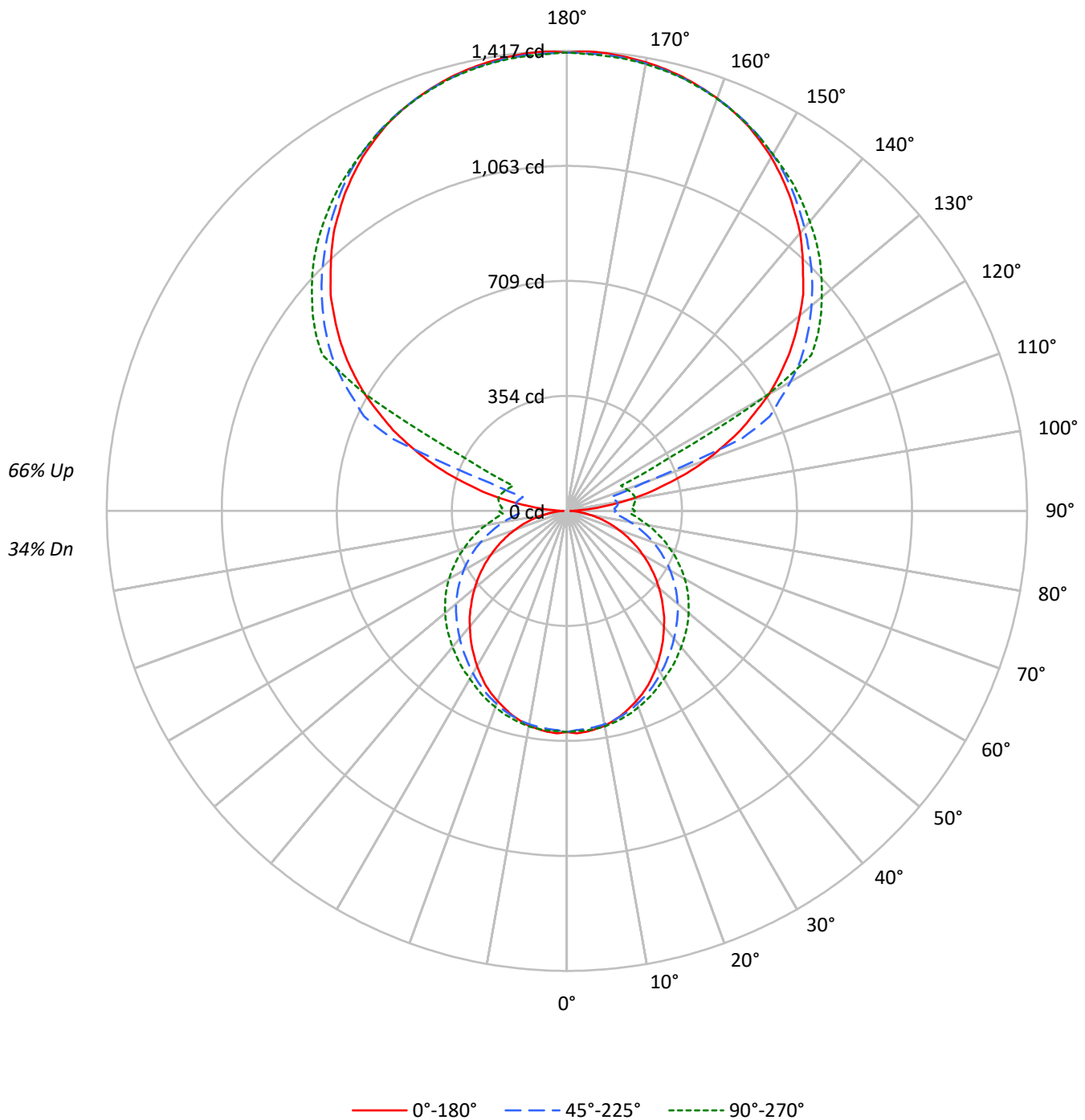
Lumens per Lamp: N/A
Luminaire Lumens: 6739.0 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42			34
1	93	89	84	81	84	80	76	73	64	61	59	49	47	46	35	34	33			27
2	84	77	70	65	76	69	64	59	55	51	48	42	40	37	30	29	27			22
3	77	67	60	54	69	61	54	49	48	44	40	37	34	31	27	24	23			18
4	70	59	51	45	63	53	46	41	43	38	34	33	29	26	24	21	19			15
5	64	52	44	38	57	47	40	35	38	33	29	29	25	22	21	19	16			13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14			11
7	54	42	34	28	49	38	31	26	31	25	22	24	20	17	17	15	13			10
8	50	38	30	25	45	34	28	23	28	23	19	22	18	15	16	13	11			9
9	47	35	27	22	42	31	25	20	25	20	17	20	16	13	15	12	10			8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9			7

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	1.0
10°-20°	185.1	2.7
20°-30°	280.5	4.2
30°-40°	341.6	5.1
40°-50°	367.5	5.5
50°-60°	356.9	5.3
60°-70°	311.7	4.6
70°-80°	239.9	3.6
80°-90°	163.2	2.4
90°-100°	157.4	2.3
100°-110°	254.5	3.8
110°-120°	513.7	7.6
120°-130°	793.1	11.8
130°-140°	823.3	12.2
140°-150°	755.7	11.2
150°-160°	605.8	9.0
160°-170°	390.4	5.8
170°-180°	134.4	2.0
0°-30°	530.2	7.9
0°-40°	871.7	12.9
0°-60°	1596.1	23.7
0°-90°	2310.8	34.3
90°-120°	925.6	13.7
90°-150°	3297.6	48.9
90°-180°	4428.0	65.7
0°-180°	6739.0	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	79	151	195	209	11
95°	74	87	153	196	207	85
105°	315	375	147	193	208	337
115°	591	620	689	246	184	582
125°	832	846	897	930	942	743
135°	1029	1045	1064	1095	1101	795
145°	1192	1191	1208	1221	1221	746
155°	1313	1303	1316	1322	1314	605
165°	1383	1377	1380	1387	1380	391
175°	1415	1408	1410	1417	1407	135
180°	1412	1412	1412	1412	1412	

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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°	10.9	79.4	150.7	195.2	209.2
92.5°	34.4	82.7	145.9	186.5	199.3
95°	74.3	87.0	153.3	195.9	206.7
97.5°	126.4	85.1	158.7	198.3	211.1
100°	187.7	84.3	156.9	201.6	214.4
102.5°	254.1	284.7	152.1	198.8	212.7
105°	315.4	374.8	147.2	192.9	207.9
107.5°	388.0	437.2	142.4	187.1	202.1
110°	456.4	497.7	250.8	180.2	195.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	521.8	556.0	584.0	175.4	189.3
115°	591.2	619.5	689.4	246.1	183.5
117.5°	650.6	678.9	737.7	621.2	363.5
120°	718.0	737.2	795.1	835.0	708.0
122.5°	775.2	792.5	849.5	882.2	892.2
125°	832.5	845.7	896.7	930.5	942.5
127.5°	885.6	898.9	940.8	975.7	985.6
130°	935.6	951.0	982.9	1017.8	1024.7
132.5°	986.7	999.0	1025.0	1056.9	1063.8
135°	1028.6	1044.9	1064.0	1094.9	1100.8
137.5°	1073.5	1085.8	1100.9	1129.9	1133.8
140°	1117.5	1124.6	1137.9	1162.9	1163.7
142.5°	1154.2	1160.4	1173.7	1193.6	1193.5
145°	1192.1	1191.0	1208.4	1221.4	1221.3
147.5°	1225.8	1222.7	1240.1	1246.2	1245.0
150°	1258.4	1251.3	1267.6	1273.8	1268.7
152.5°	1286.0	1277.9	1293.2	1299.3	1292.2
155°	1312.6	1303.4	1315.7	1321.8	1313.6
157.5°	1334.0	1325.9	1335.1	1342.2	1334.0
160°	1352.4	1346.3	1352.4	1358.6	1351.4
162.5°	1368.8	1362.6	1367.7	1374.9	1365.7
165°	1383.1	1376.9	1380.0	1387.2	1380.0
167.5°	1394.3	1388.2	1391.2	1398.4	1389.2
170°	1403.5	1397.4	1399.4	1406.6	1397.4
172.5°	1409.6	1403.5	1405.5	1412.7	1403.5
175°	1414.7	1407.6	1409.6	1416.8	1406.6
177.5°	1416.8	1409.6	1410.6	1417.8	1408.6
180°	1411.7	1411.7	1411.7	1411.7	1411.7

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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	11.83	12.60	12.91	13.68	15.15	14.91	15.68	15.98	16.75	18.23
	3H	13.29	13.98	14.37	15.07	16.56	17.49	18.18	18.57	19.27	20.76
	4H	13.76	14.42	14.85	15.51	17.01	18.74	19.40	19.83	20.49	21.99
	6H	14.04	14.65	15.14	15.74	17.25	20.03	20.64	21.13	21.73	23.24
	8H	14.09	14.68	15.20	15.78	17.29	20.69	21.27	21.79	22.38	23.88
	12H	14.11	14.66	15.22	15.76	17.29	21.41	21.96	22.52	23.07	24.60
4H	2H	12.87	13.53	13.97	14.62	16.12	15.23	15.89	16.33	16.98	18.47
	3H	14.57	15.13	15.68	16.25	17.76	18.01	18.57	19.12	19.68	21.20
	4H	15.19	15.71	16.30	16.81	18.34	19.43	19.94	20.53	21.04	22.58
	6H	15.60	16.05	16.72	17.18	18.70	20.89	21.33	22.00	22.46	23.98
	8H	15.71	16.12	16.83	17.25	18.79	21.64	22.06	22.76	23.18	24.72
	12H	15.75	16.13	16.88	17.26	18.80	22.47	22.85	23.60	23.98	25.52
8H	4H	15.98	16.39	17.09	17.51	19.05	19.56	19.98	20.68	21.10	22.64
	6H	16.60	16.95	17.74	18.11	19.65	21.19	21.54	22.33	22.70	24.23
	8H	16.82	17.13	17.97	18.27	19.83	22.08	22.38	23.22	23.52	25.08
	12H	16.95	17.22	18.10	18.36	19.96	23.07	23.34	24.21	24.48	26.07
12H	4H	16.17	16.55	17.30	17.68	19.23	19.53	19.91	20.67	21.04	22.59
	6H	16.94	17.24	18.08	18.39	19.94	21.21	21.52	22.35	22.66	24.22
	8H	17.24	17.51	18.39	18.65	20.24	22.14	22.41	23.28	23.55	25.14