

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: P997802

Luminaire Tested: SA2XXDIP-B1005D1080UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P997802
REPORT IS A COMBINATION OF REPORTS P983536 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D1080UB2750-4F0-XX-W2A-D_5000K
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

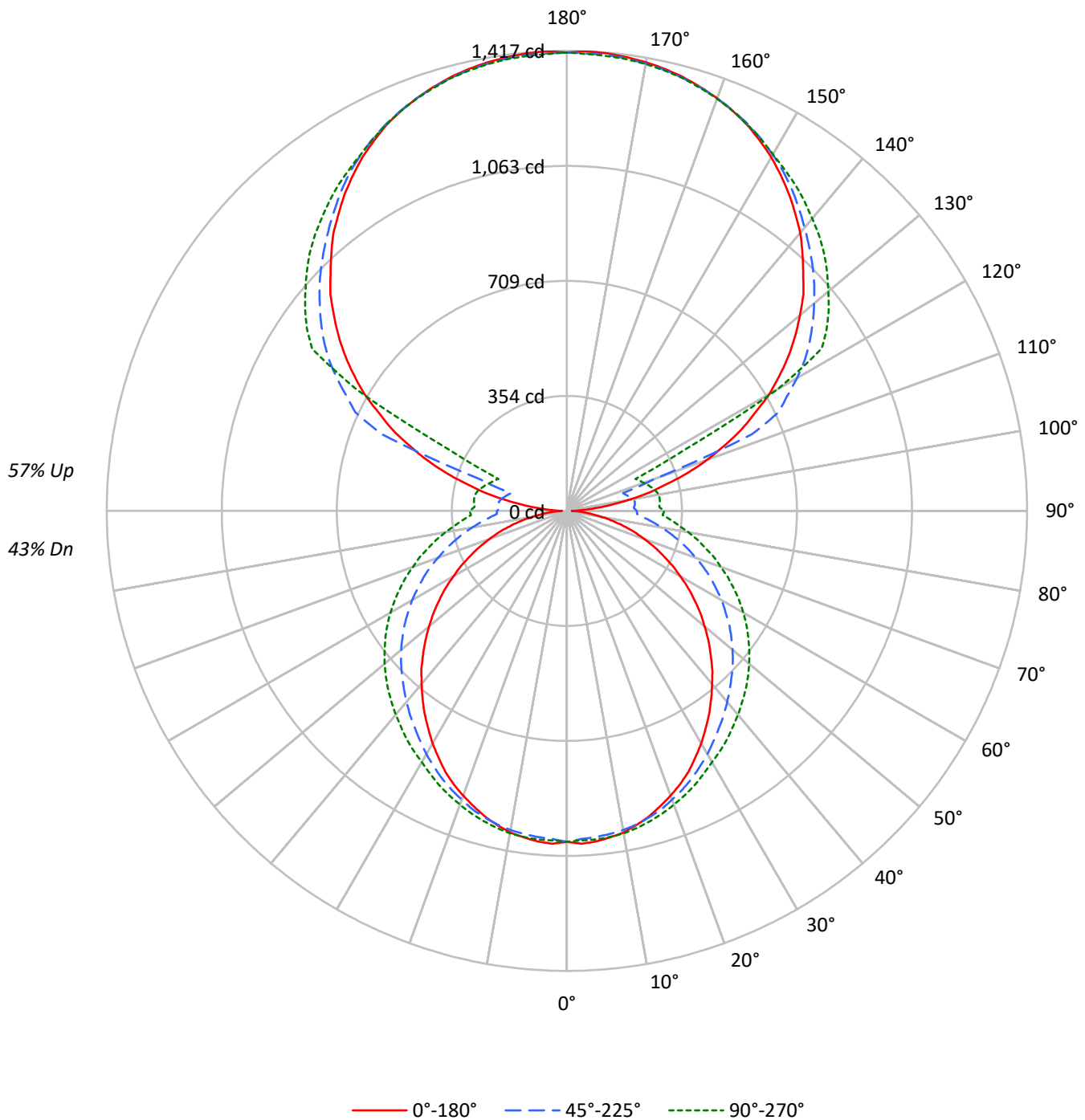
Lumens per Lamp: N/A
Luminaire Lumens: 8029.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 96.3
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	95	90	86	82	86	82	79	75	68	65	63	54	52	51	42	41	39
2	86	78	71	66	78	71	65	61	59	54	51	47	44	41	36	34	32
3	78	68	60	54	71	62	55	50	51	46	42	41	37	34	32	29	27
4	71	60	52	45	65	55	48	42	45	40	35	36	32	29	28	25	23
5	65	53	45	39	59	49	41	36	40	35	30	32	28	25	25	22	20
6	60	47	39	33	54	44	36	31	36	30	26	29	25	22	23	20	17
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	21	17	15
8	51	39	31	25	47	36	29	24	30	24	20	24	20	17	19	16	13
9	48	35	28	22	43	32	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16130	16130	16130
5°	16202	15441	15354
10°	16094	14906	14688
15°	15867	14353	14006
20°	15580	13772	13358
25°	15298	13216	12771
30°	14901	12651	12190
35°	14500	12105	11764
40°	14078	11634	11339
45°	13674	11207	10970
50°	13243	10813	10604
55°	12787	10395	10233
60°	12235	9958	9842
65°	11653	9457	9392
70°	11000	8921	8909
75°	10159	8383	8452
80°	8846	7821	7978
85°	7515	7294	7570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13674 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	1.2
10°-20°	277.0	3.5
20°-30°	419.8	5.2
30°-40°	511.2	6.4
40°-50°	550.0	6.8
50°-60°	534.1	6.7
60°-70°	466.4	5.8
70°-80°	359.0	4.5
80°-90°	242.9	3.0
90°-100°	212.4	2.6
100°-110°	294.7	3.7
110°-120°	540.2	6.7
120°-130°	807.9	10.1
130°-140°	829.5	10.3
140°-150°	756.7	9.4
150°-160°	605.8	7.5
160°-170°	390.4	4.9
170°-180°	134.4	1.7
0°-30°	793.4	9.9
0°-40°	1304.6	16.2
0°-60°	2388.7	29.8
0°-90°	3457.1	43.1
90°-120°	1047.3	13.0
90°-150°	3441.4	42.9
90°-180°	4572.0	56.9
0°-180°	8029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1022	1018	1009	1018	1016	97
15°	975	978	978	991	989	275
25°	886	896	910	927	932	407
35°	764	789	817	849	860	477
45°	626	666	718	764	778	483
55°	480	533	610	663	682	429
65°	328	400	487	548	567	326
75°	182	264	359	422	442	192
85°	53	145	239	301	322	56
90°	16	113	215	280	299	14
95°	78	114	210	271	288	88
105°	318	391	189	252	272	340
115°	593	627	719	290	233	583
125°	834	847	913	960	977	744
135°	1029	1045	1069	1111	1120	795
145°	1192	1191	1208	1224	1227	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°	1019.0	1019.0	1019.0	1019.0	1019.0
2.5°	1026.3	1021.9	1011.6	1019.0	1016.0
5°	1021.9	1017.5	1008.6	1017.5	1016.0
7.5°	1014.5	1011.6	1004.2	1014.5	1013.1
10°	1005.7	1002.7	998.3	1010.1	1008.6
12.5°	990.9	992.4	989.4	1001.2	999.8
15°	974.7	977.6	977.6	990.9	989.4
17.5°	954.0	959.9	964.3	977.6	977.6
20°	933.3	940.7	946.6	962.8	962.8
22.5°	911.2	920.0	928.9	945.1	948.1
25°	886.1	896.4	909.7	927.4	931.8
27.5°	856.5	872.8	887.5	909.7	912.6
30°	827.0	846.2	865.4	889.0	893.4
32.5°	794.5	816.6	840.3	868.3	877.2
35°	763.5	788.6	816.6	849.1	859.5
37.5°	729.5	757.6	793.0	828.5	838.8
40°	695.6	728.0	767.9	806.3	819.6
42.5°	663.1	695.6	742.8	785.6	798.9
45°	626.1	666.0	717.7	763.5	778.3
47.5°	590.7	633.5	692.6	739.9	756.1
50°	553.8	599.6	666.0	716.2	732.5
52.5°	518.3	567.1	638.0	689.6	707.4
55°	479.9	533.1	609.9	663.1	682.3
57.5°	443.0	502.1	578.9	636.5	655.7
60°	403.2	466.7	550.8	606.9	627.6
62.5°	367.7	434.2	518.3	578.9	598.1
65°	327.8	400.2	487.3	547.9	567.1
67.5°	292.4	367.7	456.3	516.9	537.5
70°	254.0	330.8	422.4	485.9	503.6
72.5°	218.6	298.3	391.3	453.4	475.5
75°	181.6	264.3	358.9	422.4	441.6
77.5°	146.2	231.9	327.8	391.3	412.0
80°	110.8	200.8	296.8	358.9	379.5
82.5°	81.2	169.8	267.3	329.3	348.5
85°	53.2	144.7	239.2	301.3	321.9
87.5°	32.5	121.1	215.6	276.2	295.4
90°	15.8	112.7	215.3	279.5	299.3
92.5°	38.8	113.1	206.1	265.8	284.6
95°	78.2	113.9	209.6	270.8	287.6
97.5°	129.8	109.6	211.6	269.3	288.1
100°	191.1	105.9	205.9	268.7	287.0
102.5°	257.1	303.8	197.6	262.0	281.3
105°	317.9	391.4	189.3	252.2	272.5
107.5°	390.5	451.4	181.1	242.5	262.8
110°	458.4	509.4	286.6	231.7	252.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	523.8	565.8	616.4	223.4	242.7
115°	593.2	626.9	718.8	290.2	233.0
117.5°	652.0	684.2	763.7	661.9	409.0
120°	719.4	740.6	818.1	871.8	750.1
122.5°	776.6	794.5	869.5	915.5	929.9
125°	833.5	846.7	913.3	960.4	976.8
127.5°	886.6	899.4	954.5	1001.7	1016.0
130°	936.6	951.5	993.7	1040.3	1051.1
132.5°	987.7	999.5	1032.8	1076.0	1086.8
135°	1029.1	1045.4	1069.3	1110.6	1120.4
137.5°	1074.0	1086.3	1103.9	1142.1	1149.5
140°	1118.0	1124.6	1138.9	1171.7	1175.4
142.5°	1154.7	1160.4	1173.7	1199.5	1201.8
145°	1192.1	1191.0	1208.4	1224.4	1226.6
147.5°	1225.8	1222.7	1240.1	1246.7	1247.0
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	14.20	15.05	15.21	16.07	17.43	17.28	18.12	18.28	19.14	20.51
	3H	15.66	16.42	16.68	17.45	18.84	19.87	20.63	20.88	21.66	23.04
	4H	16.14	16.86	17.16	17.90	19.28	21.12	21.84	22.14	22.88	24.27
	6H	16.42	17.09	17.46	18.13	19.53	22.41	23.09	23.45	24.12	25.53
	8H	16.48	17.12	17.52	18.17	19.57	23.07	23.71	24.11	24.77	26.17
	12H	16.49	17.10	17.54	18.15	19.58	23.80	24.41	24.85	25.46	26.88
4H	2H	15.25	15.98	16.28	17.01	18.40	17.61	18.33	18.64	19.36	20.75
	3H	16.96	17.57	18.00	18.63	20.04	20.40	21.01	21.44	22.07	23.47
	4H	17.58	18.15	18.63	19.20	20.62	21.81	22.38	22.86	23.43	24.85
	6H	17.99	18.49	19.05	19.56	20.98	23.28	23.77	24.34	24.85	26.26
	8H	18.10	18.56	19.16	19.63	21.07	24.04	24.50	25.09	25.56	27.00
	12H	18.14	18.56	19.22	19.65	21.09	24.86	25.28	25.94	26.37	27.81
8H	4H	18.37	18.83	19.42	19.90	21.33	21.96	22.42	23.01	23.48	24.92
	6H	19.00	19.39	20.08	20.50	21.93	23.58	23.97	24.66	25.08	26.51
	8H	19.22	19.56	20.31	20.66	22.11	24.47	24.82	25.56	25.91	27.36
	12H	19.35	19.66	20.45	20.75	22.24	25.47	25.77	26.56	26.86	28.35
12H	4H	18.57	18.98	19.64	20.07	21.51	21.93	22.35	23.00	23.43	24.87
	6H	19.33	19.68	20.42	20.77	22.22	23.61	23.95	24.69	25.04	26.49
	8H	19.64	19.94	20.73	21.03	22.52	24.54	24.84	25.63	25.93	27.42