

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: P997821

Luminaire Tested: SA2XXDIP-B1005D1080UB35-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P997821
REPORT IS A COMBINATION OF REPORTS P983555 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D1080UB35-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

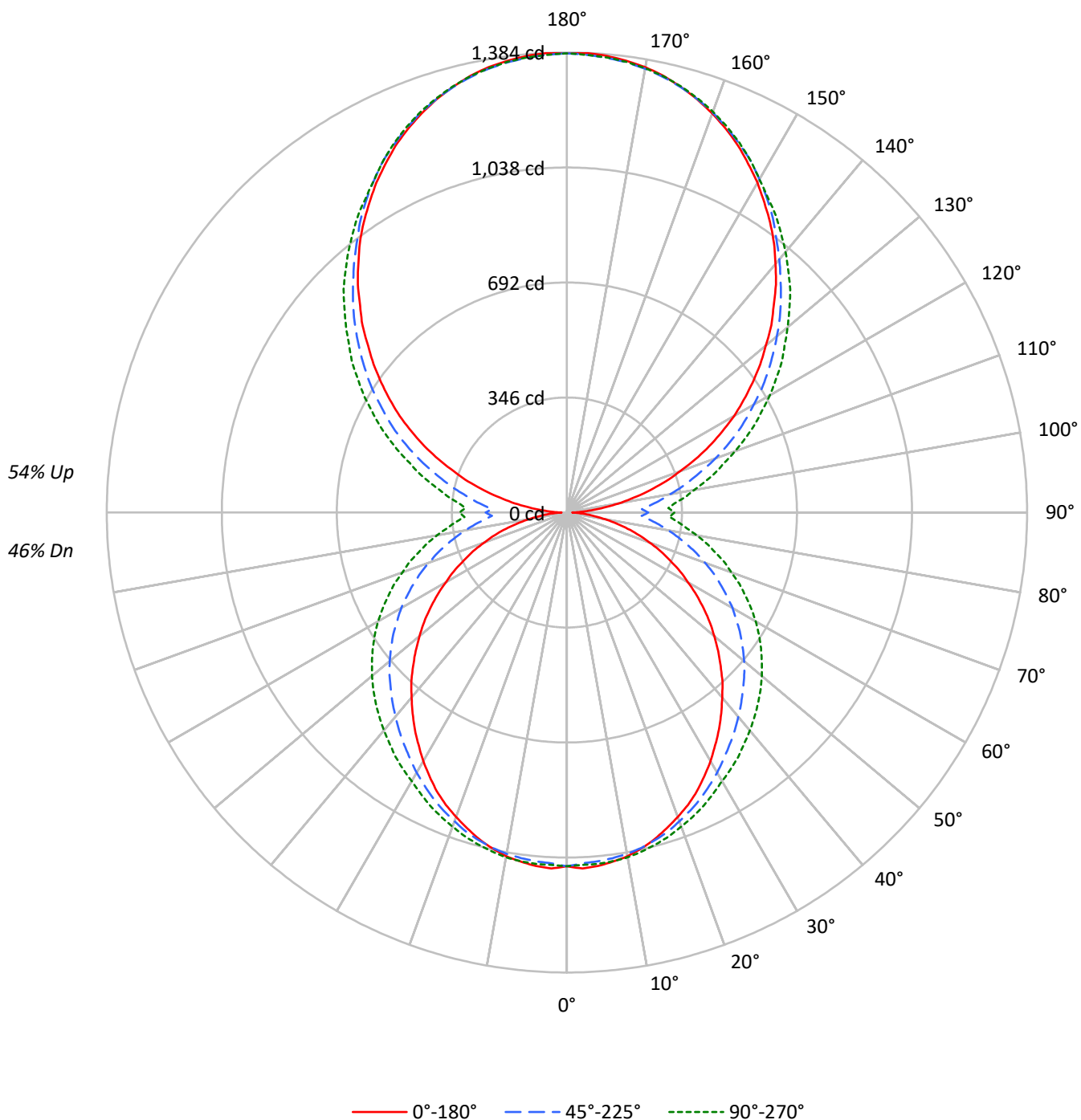
Lumens per Lamp: N/A
Luminaire Lumens: 7927.0 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P997821

CATALOG NUMBER: SA2XXDIP-B1005D1080UB35-4F0-XX-W2A-D1

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	95	91	86	82	87	83	79	76	69	66	64	56	54	52	44	42	41
2	86	78	72	66	79	72	66	61	59	55	51	48	45	42	38	36	34
3	78	68	61	54	71	63	56	50	52	47	43	42	38	35	33	30	28
4	71	60	52	46	65	55	48	42	46	40	36	37	33	30	29	26	24
5	65	53	45	39	60	49	42	36	41	35	31	33	29	26	26	23	20
6	60	48	39	33	55	44	36	31	37	31	27	30	26	22	24	20	18
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	22	18	16
8	51	39	31	25	47	36	29	24	30	25	20	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	28	22	18	23	18	15	18	15	13
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	14	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16847	16847	16847
5°	16924	16128	16037
10°	16809	15569	15342
15°	16572	14992	14631
20°	16273	14385	13954
25°	15978	13805	13340
30°	15564	13214	12733
35°	15146	12644	12286
40°	14704	12153	11844
45°	14283	11705	11458
50°	13832	11295	11076
55°	13358	10856	10688
60°	12778	10401	10279
65°	12172	9879	9810
70°	11489	9316	9305
75°	10612	8755	8828
80°	9237	8169	8334
85°	7840	7620	7908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14283 cd/sqm

TEST NUMBER: P997821

CATALOG NUMBER: SA2XXDIP-B1005D1080UB35-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.3
10°-20°	289.4	3.7
20°-30°	438.5	5.5
30°-40°	533.9	6.7
40°-50°	574.5	7.2
50°-60°	557.9	7.0
60°-70°	487.2	6.1
70°-80°	375.0	4.7
80°-90°	255.1	3.2
90°-100°	258.7	3.3
100°-110°	398.2	5.0
110°-120°	548.4	6.9
120°-130°	657.9	8.3
130°-140°	705.8	8.9
140°-150°	676.2	8.5
150°-160°	564.5	7.1
160°-170°	374.4	4.7
170°-180°	130.8	1.7
0°-30°	828.7	10.5
0°-40°	1362.6	17.2
0°-60°	2495.0	31.5
0°-90°	3612.2	45.6
90°-120°	1205.3	15.2
90°-150°	3245.1	40.9
90°-180°	4315.0	54.4
0°-180°	7927.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1067	1063	1054	1063	1061	101
15°	1018	1021	1021	1035	1034	287
25°	926	936	950	969	973	426
35°	798	824	853	887	898	498
45°	654	696	750	798	813	505
55°	501	557	637	693	713	448
65°	342	418	509	572	592	340
75°	190	276	375	441	461	201
85°	56	151	250	315	336	59
90°	17	120	244	304	323	15
95°	73	157	252	311	327	77
105°	258	306	389	445	462	273
115°	472	496	564	609	622	467
125°	682	692	738	776	789	610
135°	879	892	910	941	950	680
145°	1066	1074	1081	1091	1094	666
155°	1218	1222	1225	1231	1228	561
165°	1325	1324	1324	1332	1327	374
175°	1379	1376	1373	1381	1374	131
180°	1381	1381	1381	1381	1381	

TEST NUMBER: P997821

CATALOG NUMBER: SA2XXDIP-B1005D1080UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1064.3	1064.3	1064.3	1064.3	1064.3
2.5°	1072.0	1067.4	1056.6	1064.3	1061.2
5°	1067.4	1062.8	1053.5	1062.8	1061.2
7.5°	1059.7	1056.6	1048.9	1059.7	1058.1
10°	1050.4	1047.3	1042.7	1055.0	1053.5
12.5°	1035.0	1036.5	1033.5	1045.8	1044.2
15°	1018.0	1021.1	1021.1	1035.0	1033.5
17.5°	996.4	1002.6	1007.2	1021.1	1021.1
20°	974.8	982.6	988.7	1005.7	1005.7
22.5°	951.7	961.0	970.2	987.2	990.3
25°	925.5	936.3	950.2	968.7	973.3
27.5°	894.6	911.6	927.0	950.2	953.2
30°	863.8	883.8	903.9	928.6	933.2
32.5°	829.8	853.0	877.7	907.0	916.2
35°	797.5	823.7	853.0	886.9	897.7
37.5°	762.0	791.3	828.3	865.3	876.1
40°	726.5	760.4	802.1	842.2	856.1
42.5°	692.6	726.5	775.9	820.6	834.5
45°	654.0	695.7	749.6	797.5	812.9
47.5°	617.0	661.7	723.4	772.8	789.7
50°	578.4	626.2	695.7	748.1	765.1
52.5°	541.4	592.3	666.3	720.3	738.8
55°	501.3	556.8	637.0	692.6	712.6
57.5°	462.7	524.4	604.6	664.8	684.9
60°	421.1	487.4	575.3	634.0	655.5
62.5°	384.1	453.5	541.4	604.6	624.7
65°	342.4	418.0	509.0	572.3	592.3
67.5°	305.4	384.1	476.6	539.9	561.5
70°	265.3	345.5	441.1	507.5	526.0
72.5°	228.3	311.6	408.8	473.5	496.7
75°	189.7	276.1	374.8	441.1	461.2
77.5°	152.7	242.2	342.4	408.8	430.3
80°	115.7	209.8	310.0	374.8	396.4
82.5°	84.8	177.4	279.2	344.0	364.0
85°	55.5	151.2	249.9	314.7	336.3
87.5°	33.9	126.5	225.2	288.4	308.5
90°	16.6	120.1	244.4	303.8	323.4
92.5°	39.5	130.6	225.8	287.2	305.7
95°	72.9	157.1	252.0	310.6	326.8
97.5°	112.2	189.0	283.2	340.3	358.8
100°	158.8	225.3	315.1	372.2	388.0
102.5°	206.3	264.2	352.1	408.8	424.6
105°	258.3	306.5	389.2	445.4	462.4
107.5°	312.0	353.6	430.8	484.4	495.6
110°	361.7	399.5	475.1	524.5	537.9

TEST NUMBER: P997821

CATALOG NUMBER: SA2XXDIP-B1005D1080UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	417.7	449.3	519.1	565.0	579.6
115°	472.5	496.4	563.5	608.6	622.1
117.5°	525.7	547.4	606.4	649.1	661.0
120°	580.5	596.0	648.4	691.6	705.1
122.5°	630.6	643.8	695.0	733.2	744.8
125°	681.5	692.0	737.8	776.0	788.8
127.5°	732.8	744.1	781.1	815.0	825.3
130°	780.6	794.2	824.3	859.0	866.7
132.5°	834.3	844.3	868.7	898.4	907.2
135°	879.3	892.1	909.9	941.2	950.0
137.5°	930.6	941.1	951.2	979.3	985.5
140°	976.0	985.0	994.0	1018.7	1023.2
142.5°	1022.7	1031.7	1035.2	1054.8	1057.9
145°	1065.5	1073.6	1080.6	1091.1	1094.1
147.5°	1105.1	1115.6	1120.3	1124.1	1124.1
150°	1145.9	1152.9	1157.6	1161.1	1157.6
152.5°	1182.0	1189.0	1194.9	1199.5	1194.9
155°	1218.2	1221.7	1225.2	1231.0	1227.5
157.5°	1249.7	1252.0	1254.3	1262.5	1256.6
160°	1277.6	1280.0	1281.1	1288.1	1283.5
162.5°	1303.3	1303.3	1304.4	1312.6	1306.8
165°	1325.4	1324.3	1324.3	1332.4	1326.6
167.5°	1345.2	1341.7	1341.7	1349.9	1344.1
170°	1360.4	1356.9	1355.7	1363.9	1356.9
172.5°	1370.9	1367.4	1366.2	1374.4	1367.4
175°	1379.0	1375.5	1373.2	1381.4	1374.4
177.5°	1383.7	1380.2	1377.9	1384.9	1377.9
180°	1381.4	1381.4	1381.4	1381.4	1381.4

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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	14.60	15.47	15.59	16.47	17.80	17.68	18.54	18.66	19.55	20.88
	3H	16.06	16.85	17.06	17.86	19.21	20.27	21.05	21.26	22.06	23.41
	4H	16.54	17.28	17.54	18.30	19.66	21.52	22.27	22.53	23.28	24.64
	6H	16.82	17.51	17.84	18.53	19.90	22.82	23.51	23.83	24.53	25.90
	8H	16.88	17.54	17.90	18.58	19.94	23.48	24.14	24.50	25.17	26.54
	12H	16.90	17.53	17.93	18.56	19.95	24.20	24.83	25.23	25.86	27.25
4H	2H	15.65	16.40	16.66	17.41	18.77	18.01	18.75	19.02	19.77	21.13
	3H	17.36	17.99	18.38	19.04	20.41	20.80	21.43	21.82	22.47	23.85
	4H	17.98	18.57	19.01	19.60	20.99	22.22	22.80	23.24	23.83	25.23
	6H	18.40	18.91	19.44	19.96	21.35	23.68	24.19	24.72	25.25	26.64
	8H	18.51	18.98	19.55	20.03	21.44	24.44	24.92	25.48	25.97	27.37
	12H	18.55	18.98	19.61	20.05	21.46	25.27	25.70	26.33	26.77	28.18
8H	4H	18.77	19.25	19.81	20.30	21.70	22.36	22.84	23.40	23.89	25.29
	6H	19.41	19.81	20.47	20.90	22.30	23.99	24.39	25.05	25.48	26.88
	8H	19.63	19.98	20.70	21.06	22.48	24.88	25.23	25.95	26.31	27.73
	12H	19.76	20.08	20.84	21.15	22.61	25.88	26.19	26.95	27.26	28.72
12H	4H	18.97	19.40	20.03	20.47	21.88	22.34	22.77	23.39	23.83	25.24
	6H	19.74	20.10	20.81	21.17	22.59	24.02	24.37	25.08	25.45	26.87
	8H	20.05	20.36	21.12	21.43	22.89	24.94	25.26	26.02	26.33	27.79