

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: P998397

Luminaire Tested: SA2XXDIP-B485D1080UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998397
REPORT IS A COMBINATION OF REPORTS P984137 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D1080UB2750-4F0-XX-W2A-F_2700K
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

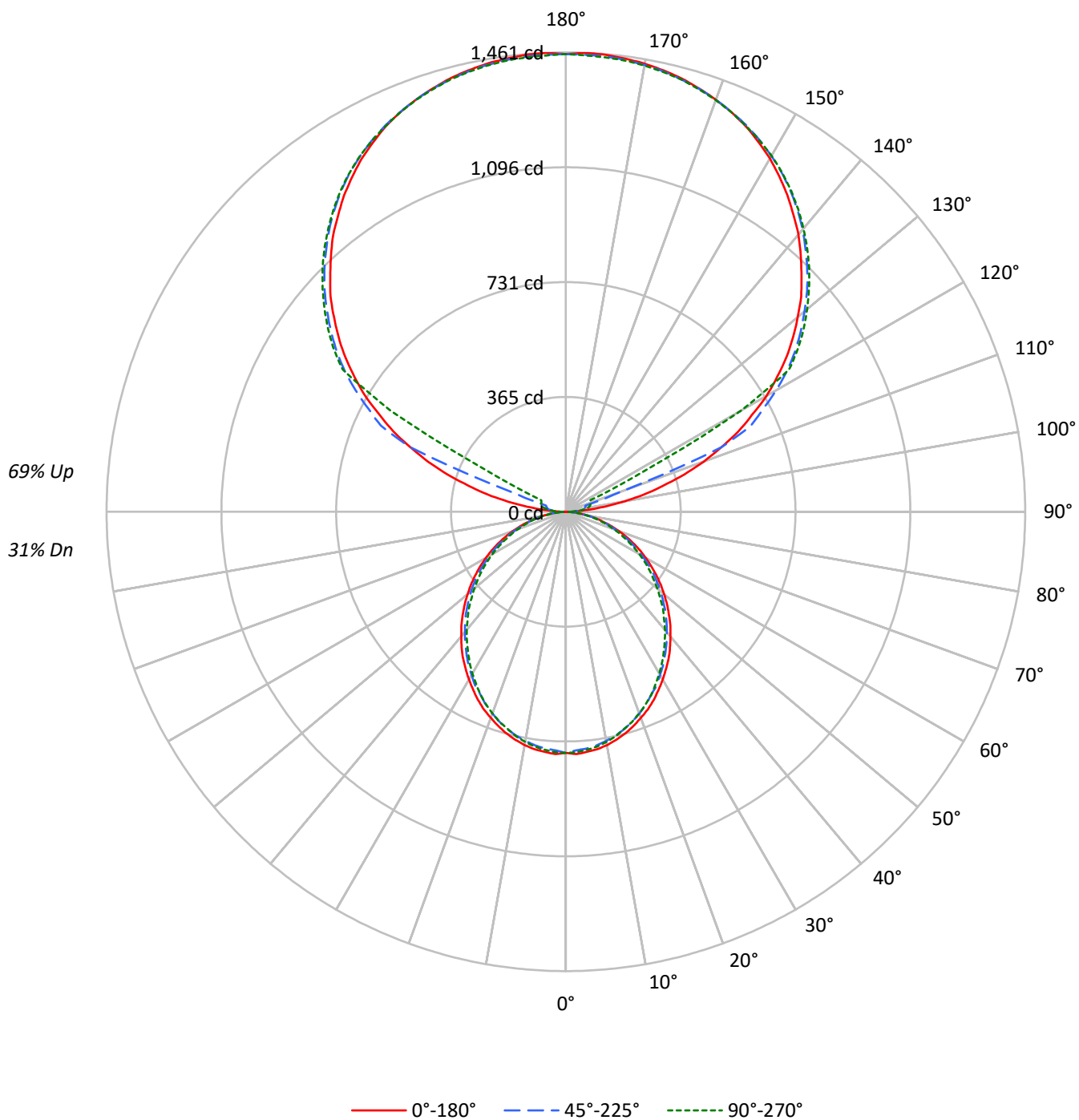
Lumens per Lamp: N/A
Luminaire Lumens: 6221.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 59
Input Voltage (V): 120
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: P998397

CATALOG NUMBER: SA2XXDIP-B485D1080UB2750-4F0-XX-W2A-F_2700K

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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	94	89	86	82	84	81	77	74	64	62	60	49	47	46	34	34	33
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12
9	48	36	28	24	43	32	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	19	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12139	12139	12139
5°	12159	11571	11488
10°	12060	11044	10825
15°	11883	10512	10125
20°	11644	9934	9464
25°	11407	9330	8802
30°	11106	8764	8109
35°	10825	8165	7428
40°	10476	7574	6783
45°	10129	6989	6152
50°	9752	6394	5497
55°	9353	5755	4877
60°	8906	5066	4232
65°	8415	4365	3554
70°	7791	3597	2869
75°	6931	2773	2216
80°	5884	1884	1425
85°	4266	878	607

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10129 cd/sqm

TEST NUMBER: P998397

CATALOG NUMBER: SA2XXDIP-B485D1080UB2750-4F0-XX-W2A-F_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	1.2
10°-20°	203.1	3.3
20°-30°	298.4	4.8
30°-40°	346.6	5.6
40°-50°	346.2	5.6
50°-60°	301.9	4.9
60°-70°	223.1	3.6
70°-80°	126.3	2.0
80°-90°	35.9	0.6
90°-100°	48.0	0.8
100°-110°	178.9	2.9
110°-120°	474.6	7.6
120°-130°	787.1	12.7
130°-140°	836.1	13.4
140°-150°	777.0	12.5
150°-160°	624.7	10.0
160°-170°	402.5	6.5
170°-180°	138.5	2.2
0°-30°	573.7	9.2
0°-40°	920.3	14.8
0°-60°	1568.3	25.2
0°-90°	1953.6	31.4
90°-120°	701.5	11.3
90°-150°	3101.6	49.9
90°-180°	4267.0	68.6
0°-180°	6221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	767	764	756	762	760	73
15°	730	726	716	719	715	206
25°	661	655	642	644	642	304
35°	570	563	551	546	543	356
45°	464	459	448	440	436	358
55°	351	347	338	329	325	314
65°	237	232	225	218	215	234
75°	124	122	119	114	116	132
85°	30	30	29	26	26	34
90°	1	13	21	26	28	6
95°	68	34	41	46	45	81
105°	320	352	64	76	80	342
115°	606	624	650	162	86	596
125°	856	870	890	897	901	764
135°	1060	1076	1086	1096	1094	819
145°	1229	1228	1246	1253	1248	769
155°	1354	1344	1357	1363	1354	624
165°	1426	1420	1423	1430	1423	403
175°	1459	1451	1454	1461	1450	139
180°	1456	1456	1456	1456	1456	

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CATALOG NUMBER: SA2XXDIP-B485D1080UB2750-4F0-XX-W2A-F_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	766.9	766.9	766.9	766.9	766.9
2.5°	771.3	767.6	759.5	766.9	765.4
5°	766.9	763.9	755.8	761.7	760.2
7.5°	761.7	757.3	749.2	755.1	753.6
10°	753.6	748.4	739.6	745.5	743.3
12.5°	742.5	738.1	729.2	732.9	731.5
15°	730.0	725.6	716.0	718.9	715.2
17.5°	714.5	710.1	700.5	704.2	700.5
20°	697.5	693.1	682.8	685.0	682.1
22.5°	680.6	673.9	664.4	664.4	662.9
25°	660.7	654.8	642.2	643.7	642.2
27.5°	638.6	633.4	623.8	621.6	617.9
30°	616.4	610.5	599.5	597.3	594.3
32.5°	592.8	588.4	576.6	572.2	569.2
35°	570.0	562.6	550.8	546.4	542.7
37.5°	544.2	537.5	525.7	520.6	516.9
40°	517.6	511.7	499.9	493.3	490.3
42.5°	491.8	485.9	474.1	466.7	462.3
45°	463.8	458.6	447.6	439.5	436.5
47.5°	436.5	431.4	419.6	411.4	407.0
50°	407.8	404.1	393.8	383.4	379.7
52.5°	379.7	374.6	365.0	356.9	351.7
55°	351.0	346.6	337.7	328.9	325.2
57.5°	322.2	318.5	309.0	300.1	297.2
60°	293.5	290.5	280.2	272.1	269.9
62.5°	265.4	260.3	252.9	245.5	242.6
65°	236.7	232.3	224.9	218.3	214.6
67.5°	207.2	203.5	196.9	191.7	188.8
70°	179.9	177.0	170.3	165.2	162.2
72.5°	151.9	148.9	145.3	140.1	137.9
75°	123.9	122.4	118.7	114.3	115.8
77.5°	98.8	95.9	94.4	92.2	90.0
80°	73.7	73.0	71.5	69.3	67.8
82.5°	50.1	50.1	49.4	46.5	46.5
85°	30.2	29.5	28.8	26.5	25.8
87.5°	13.3	11.8	10.3	8.1	7.4
90°	1.1	12.6	21.1	26.3	28.4
92.5°	26.3	22.1	25.3	27.4	28.4
95°	68.5	33.7	41.1	46.3	45.3
97.5°	123.2	36.9	53.7	56.9	57.9
100°	186.4	42.1	60.0	68.5	70.6
102.5°	255.9	253.8	62.1	73.7	76.9
105°	320.2	351.8	64.3	75.8	80.0
107.5°	395.0	421.3	66.4	77.9	82.2
110°	466.6	488.7	184.3	79.0	83.2

TEST NUMBER: P998397

CATALOG NUMBER: SA2XXDIP-B485D1080UB2750-4F0-XX-W2A-F_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	534.0	553.0	535.1	81.1	84.3
115°	605.6	623.5	649.9	162.2	86.4
117.5°	667.8	688.9	706.8	556.1	280.2
120°	737.3	753.1	772.1	784.7	642.5
122.5°	796.3	813.1	834.2	840.5	841.6
125°	856.3	870.0	890.0	897.4	900.6
127.5°	911.1	925.8	941.6	952.2	953.2
130°	962.7	979.6	991.1	1002.7	1001.7
132.5°	1015.4	1029.1	1040.6	1050.1	1049.1
135°	1059.6	1076.5	1085.9	1096.5	1094.4
137.5°	1106.0	1118.6	1129.1	1139.7	1136.5
140°	1151.2	1159.7	1171.3	1180.7	1175.5
142.5°	1189.2	1196.5	1210.2	1218.7	1213.4
145°	1229.2	1228.1	1246.0	1253.4	1248.1
147.5°	1263.9	1260.8	1278.7	1284.0	1279.7
150°	1297.7	1290.3	1307.1	1313.5	1308.2
152.5°	1326.1	1317.7	1333.5	1339.8	1332.4
155°	1353.5	1344.0	1356.6	1363.0	1354.5
157.5°	1375.6	1367.2	1376.6	1384.0	1375.6
160°	1394.6	1388.2	1394.6	1400.9	1393.5
162.5°	1411.4	1405.1	1410.4	1417.7	1408.2
165°	1426.2	1419.8	1423.0	1430.4	1423.0
167.5°	1437.7	1431.4	1434.6	1442.0	1432.5
170°	1447.2	1440.9	1443.0	1450.4	1440.9
172.5°	1453.5	1447.2	1449.3	1456.7	1447.2
175°	1458.8	1451.4	1453.5	1460.9	1450.4
177.5°	1460.9	1453.5	1454.6	1462.0	1452.5
180°	1455.6	1455.6	1455.6	1455.6	1455.6

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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	11.88	12.60	12.99	13.70	15.21	12.67	13.38	13.77	14.48	15.99
	3H	13.21	13.85	14.32	14.96	16.49	14.28	14.92	15.39	16.03	17.56
	4H	13.61	14.22	14.73	15.32	16.86	14.87	15.47	15.99	16.58	18.12
	6H	13.82	14.38	14.95	15.49	17.04	15.26	15.82	16.39	16.93	18.48
	8H	13.85	14.38	14.98	15.50	17.05	15.37	15.90	16.50	17.03	18.57
	12H	13.83	14.34	14.97	15.46	17.02	15.41	15.91	16.54	17.03	18.60
4H	2H	12.33	12.94	13.46	14.05	15.59	12.98	13.59	14.11	14.70	16.23
	3H	13.84	14.35	14.97	15.48	17.03	14.75	15.25	15.88	16.39	17.94
	4H	14.34	14.81	15.48	15.93	17.50	15.42	15.89	16.56	17.01	18.58
	6H	14.63	15.03	15.78	16.18	17.74	15.91	16.31	17.05	17.46	19.02
	8H	14.69	15.06	15.83	16.20	17.77	16.05	16.42	17.19	17.56	19.14
	12H	14.68	15.02	15.84	16.17	17.75	16.10	16.44	17.26	17.59	19.17
8H	4H	14.50	14.88	15.65	16.01	17.59	15.49	15.87	16.64	17.01	18.58
	6H	14.88	15.19	16.04	16.37	17.94	16.06	16.37	17.22	17.55	19.12
	8H	14.98	15.25	16.15	16.41	18.00	16.24	16.51	17.41	17.67	19.27
	12H	15.01	15.24	16.18	16.40	18.03	16.34	16.57	17.51	17.73	19.36
12H	4H	14.48	14.82	15.64	15.97	17.55	15.45	15.79	16.61	16.94	18.52
	6H	14.90	15.17	16.07	16.32	17.92	16.05	16.32	17.22	17.48	19.07
	8H	15.00	15.24	16.18	16.39	18.02	16.24	16.47	17.41	17.63	19.26