

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: P998646

Luminaire Tested: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998646
REPORT IS A COMBINATION OF REPORTS P984389 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

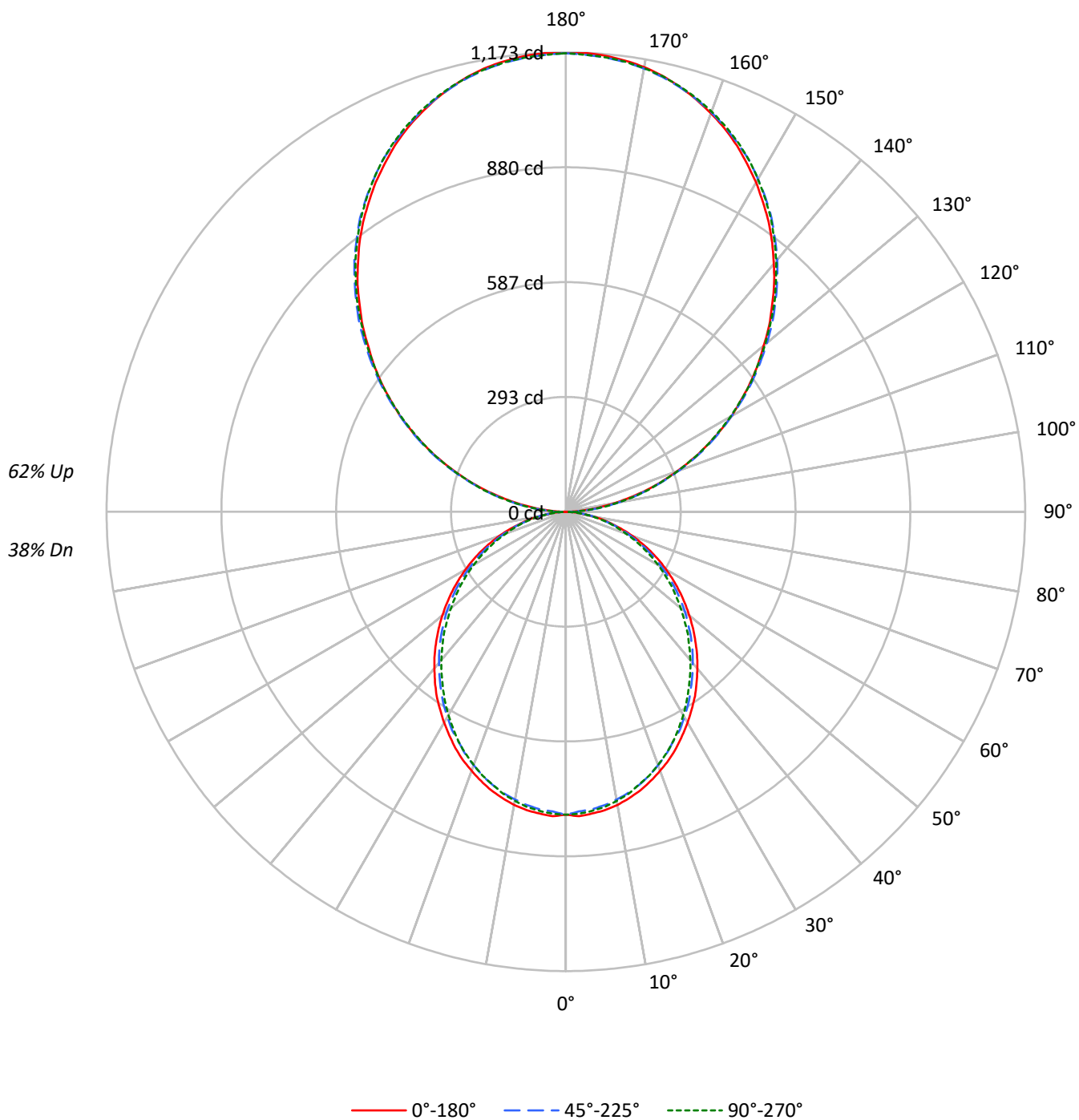
Lumens per Lamp: N/A
Luminaire Lumens: 5245.0 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
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: P998646

CATALOG NUMBER: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P998646

CATALOG NUMBER: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1

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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45
1	95	91	87	83	86	82	79	76	67	65	63	53	51	50	39	39	38
2	86	79	73	68	78	72	67	63	59	55	52	46	44	42	35	33	32
3	79	70	62	57	71	63	57	52	52	47	44	41	38	35	31	29	27
4	72	62	54	48	65	56	49	44	46	41	37	36	33	30	28	25	23
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20
6	61	49	41	35	55	45	38	33	37	32	28	29	26	23	22	20	18
7	56	44	36	31	51	40	34	29	33	28	24	27	23	20	20	18	16
8	52	40	32	27	47	37	30	25	30	25	22	24	21	18	19	16	14
9	48	36	29	24	44	33	27	23	28	23	19	22	19	16	17	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	14	16	13	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12244	12244	12244
5°	12264	11672	11588
10°	12164	11139	10918
15°	11986	10603	10214
20°	11745	10020	9546
25°	11505	9411	8879
30°	11204	8840	8180
35°	10918	8236	7492
40°	10567	7641	6843
45°	10217	7050	6206
50°	9836	6449	5545
55°	9433	5807	4919
60°	8982	5109	4268
65°	8489	4404	3584
70°	7860	3628	2894
75°	6993	2796	2236
80°	5940	1900	1438
85°	4308	884	611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10217 cd/sqm

TEST NUMBER: P998646

CATALOG NUMBER: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.8	1.4
10°-20°	204.8	3.9
20°-30°	301.0	5.7
30°-40°	349.6	6.7
40°-50°	349.2	6.7
50°-60°	304.5	5.8
60°-70°	225.1	4.3
70°-80°	127.3	2.4
80°-90°	36.9	0.7
90°-100°	72.4	1.4
100°-110°	230.3	4.4
110°-120°	394.0	7.5
120°-130°	518.2	9.9
130°-140°	581.7	11.1
140°-150°	570.4	10.9
150°-160°	478.5	9.1
160°-170°	317.3	6.1
170°-180°	110.9	2.1
0°-30°	578.7	11.0
0°-40°	928.3	17.7
0°-60°	1582.0	30.2
0°-90°	1971.3	37.6
90°-120°	696.7	13.3
90°-150°	2367.0	45.1
90°-180°	3274.0	62.4
0°-180°	5245.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	774	771	762	768	767	73
15°	736	732	722	725	722	207
25°	666	660	648	649	648	307
35°	575	568	556	551	547	359
45°	468	463	452	443	440	361
55°	354	350	341	332	328	317
65°	239	234	227	220	216	236
75°	125	124	120	115	117	133
85°	30	30	29	27	26	34
90°	1	13	35	33	34	5
95°	51	61	63	63	61	57
105°	212	215	217	219	219	224
115°	395	401	399	398	395	391
125°	575	584	581	578	577	514
135°	744	755	757	756	753	575
145°	903	910	916	917	913	564
155°	1033	1036	1038	1044	1040	475
165°	1124	1122	1122	1129	1124	317
175°	1169	1166	1164	1171	1165	111
180°	1171	1171	1171	1171	1171	

TEST NUMBER: P998646

CATALOG NUMBER: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	773.5	773.5	773.5	773.5	773.5
2.5°	778.0	774.3	766.1	773.5	772.0
5°	773.5	770.6	762.4	768.3	766.8
7.5°	768.3	763.9	755.7	761.6	760.1
10°	760.1	754.9	746.0	752.0	749.7
12.5°	749.0	744.5	735.6	739.3	737.8
15°	736.3	731.9	722.2	725.2	721.5
17.5°	720.7	716.3	706.6	710.3	706.6
20°	703.6	699.2	688.7	691.0	688.0
22.5°	686.5	679.8	670.2	670.2	668.7
25°	666.4	660.5	647.8	649.3	647.8
27.5°	644.1	638.9	629.2	627.0	623.3
30°	621.8	615.9	604.7	602.5	599.5
32.5°	598.0	593.5	581.6	577.2	574.2
35°	574.9	567.5	555.6	551.1	547.4
37.5°	548.9	542.2	530.3	525.1	521.4
40°	522.1	516.2	504.3	497.6	494.6
42.5°	496.1	490.2	478.3	470.8	466.4
45°	467.8	462.6	451.5	443.3	440.3
47.5°	440.3	435.1	423.2	415.0	410.6
50°	411.3	407.6	397.2	386.8	383.0
52.5°	383.0	377.8	368.2	360.0	354.8
55°	354.0	349.6	340.7	331.7	328.0
57.5°	325.0	321.3	311.6	302.7	299.7
60°	296.0	293.1	282.6	274.5	272.2
62.5°	267.8	262.6	255.1	247.7	244.7
65°	238.8	234.3	226.9	220.2	216.4
67.5°	209.0	205.3	198.6	193.4	190.4
70°	181.5	178.5	171.8	166.6	163.6
72.5°	153.2	150.2	146.5	141.3	139.1
75°	125.0	123.5	119.7	115.3	116.8
77.5°	99.7	96.7	95.2	93.0	90.7
80°	74.4	73.6	72.1	69.9	68.4
82.5°	50.6	50.6	49.8	46.9	46.9
85°	30.5	29.8	29.0	26.8	26.0
87.5°	13.4	11.9	10.4	8.2	7.4
90°	1.0	12.8	34.6	32.6	33.6
92.5°	21.7	29.6	30.6	31.6	31.6
95°	51.4	61.3	63.2	63.2	61.3
97.5°	86.0	94.9	98.8	98.8	98.8
100°	125.5	133.4	136.4	136.4	135.4
102.5°	167.0	172.9	176.9	177.9	176.9
105°	212.4	215.4	217.4	219.4	219.4
107.5°	257.9	261.9	261.9	262.8	257.9
110°	301.4	307.3	307.3	307.3	304.3

TEST NUMBER: P998646

CATALOG NUMBER: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	348.8	354.7	353.7	350.8	348.8
115°	395.2	401.2	399.2	398.2	395.2
117.5°	441.7	449.6	444.7	441.7	438.7
120°	488.1	496.0	488.1	488.1	485.2
122.5°	530.6	540.5	535.6	532.6	530.6
125°	575.1	584.0	581.0	578.0	577.1
127.5°	618.6	629.4	625.5	621.5	618.6
130°	659.1	671.9	669.9	668.0	664.0
132.5°	704.5	714.4	715.4	710.5	707.5
135°	744.1	754.9	756.9	755.9	752.9
137.5°	787.5	796.4	798.4	797.4	793.5
140°	826.1	835.0	839.9	839.9	835.9
142.5°	865.6	874.5	877.4	878.4	874.5
145°	903.1	910.1	916.0	917.0	913.0
147.5°	936.7	945.6	949.6	951.6	947.6
150°	971.3	977.2	981.2	984.2	981.2
152.5°	1002.0	1007.9	1012.8	1016.8	1012.8
155°	1032.6	1035.5	1038.5	1043.5	1040.5
157.5°	1059.3	1061.2	1063.2	1070.1	1065.2
160°	1083.0	1085.0	1085.9	1091.9	1087.9
162.5°	1104.7	1104.7	1105.7	1112.6	1107.7
165°	1123.5	1122.5	1122.5	1129.4	1124.5
167.5°	1140.3	1137.3	1137.3	1144.2	1139.3
170°	1153.1	1150.2	1149.2	1156.1	1150.2
172.5°	1162.0	1159.1	1158.1	1165.0	1159.1
175°	1168.9	1166.0	1164.0	1170.9	1165.0
177.5°	1172.9	1169.9	1168.0	1173.9	1168.0
180°	1170.9	1170.9	1170.9	1170.9	1170.9

TEST NUMBER: P998646

CATALOG NUMBER: SA2XXDIP-B485D925UB30-4F0-XX-W2A-F1

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	12.67	13.43	13.72	14.49	15.93	13.45	14.21	14.51	15.27	16.71
	3H	14.00	14.68	15.06	15.75	17.20	15.07	15.75	16.13	16.82	18.27
	4H	14.40	15.04	15.47	16.11	17.58	15.65	16.30	16.73	17.37	18.83
	6H	14.61	15.21	15.70	16.28	17.76	16.05	16.65	17.14	17.72	19.20
	8H	14.64	15.20	15.73	16.29	17.76	16.16	16.72	17.25	17.81	19.28
	12H	14.63	15.16	15.72	16.25	17.74	16.20	16.74	17.30	17.82	19.31
4H	2H	13.12	13.77	14.21	14.84	16.30	13.77	14.41	14.85	15.48	16.95
	3H	14.63	15.17	15.72	16.27	17.74	15.54	16.08	16.63	17.17	18.65
	4H	15.13	15.63	16.23	16.72	18.21	16.21	16.71	17.31	17.80	19.29
	6H	15.43	15.85	16.53	16.97	18.46	16.70	17.13	17.81	18.24	19.73
	8H	15.48	15.88	16.59	16.99	18.49	16.85	17.24	17.95	18.35	19.85
	12H	15.48	15.84	16.60	16.96	18.47	16.90	17.26	18.02	18.38	19.89
8H	4H	15.30	15.70	16.40	16.80	18.31	16.29	16.69	17.40	17.79	19.30
	6H	15.68	16.01	16.81	17.15	18.66	16.86	17.18	17.98	18.33	19.83
	8H	15.78	16.07	16.91	17.19	18.72	17.04	17.33	18.18	18.46	19.98
	12H	15.81	16.06	16.95	17.18	18.74	17.14	17.39	18.28	18.51	20.07
12H	4H	15.28	15.64	16.40	16.75	18.26	16.25	16.61	17.37	17.73	19.24
	6H	15.70	15.98	16.83	17.11	18.63	16.85	17.13	17.98	18.26	19.78
	8H	15.80	16.06	16.94	17.18	18.74	17.04	17.29	18.18	18.41	19.97