

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: P998523

Luminaire Tested: SA2XXDIP-B485D530UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998523
REPORT IS A COMBINATION OF REPORTS P984266 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D530UB30-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

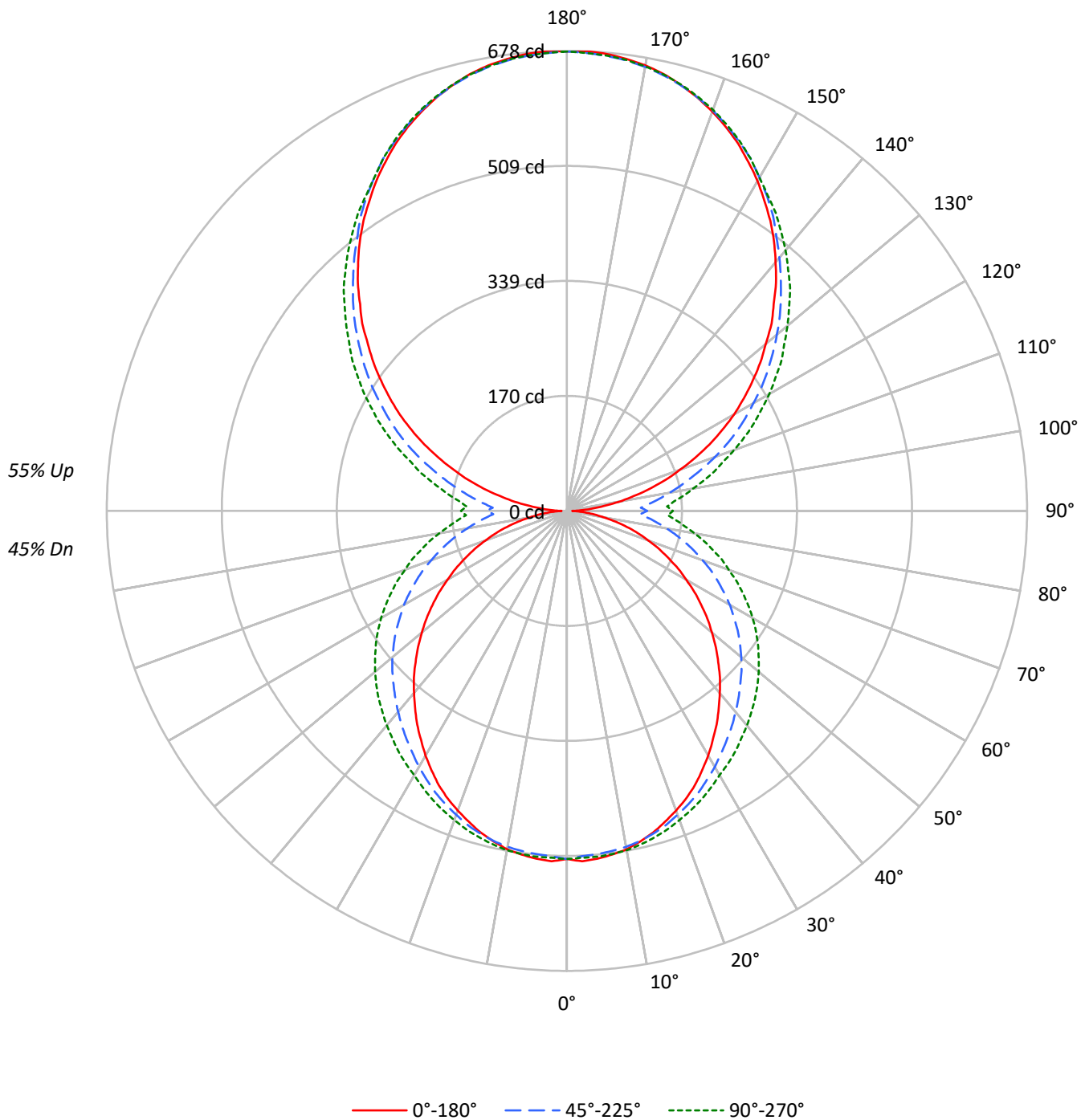
Lumens per Lamp: N/A
Luminaire Lumens: 3853.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 39.4
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: P998523

CATALOG NUMBER: SA2XXDIP-B485D530UB30-4F0-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					0
RW	70	50	30	10	70	50	30	10	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	45	45	45
1	95	90	86	82	87	83	79	76	69	66	63	56	54	52	44	42	41	35	35	35
2	86	78	72	66	79	72	66	61	59	55	51	48	45	42	38	35	33	28	28	28
3	78	68	60	54	71	63	56	50	52	47	43	42	38	35	33	30	28	23	23	23
4	71	60	52	45	65	55	48	42	46	40	36	37	33	30	29	26	24	20	20	20
5	65	53	45	39	59	49	42	36	41	35	31	33	29	25	26	23	20	17	17	17
6	60	48	39	33	55	44	36	31	37	31	26	30	25	22	23	20	18	15	15	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13	13	13
8	51	39	31	25	47	36	29	24	30	24	20	25	20	17	20	16	14	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	14	11	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8122	8122	8122
5°	8159	7775	7733
10°	8105	7506	7397
15°	7990	7228	7054
20°	7846	6935	6728
25°	7703	6655	6432
30°	7505	6371	6139
35°	7302	6097	5924
40°	7090	5859	5711
45°	6886	5643	5524
50°	6669	5445	5341
55°	6440	5234	5153
60°	6160	5015	4957
65°	5869	4763	4730
70°	5539	4492	4486
75°	5119	4221	4257
80°	4455	3940	4018
85°	3786	3674	3812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6886 cd/sqm

TEST NUMBER: P998523

CATALOG NUMBER: SA2XXDIP-B485D530UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	1.3
10°-20°	139.5	3.6
20°-30°	211.4	5.5
30°-40°	257.4	6.7
40°-50°	277.0	7.2
50°-60°	269.0	7.0
60°-70°	234.9	6.1
70°-80°	180.8	4.7
80°-90°	123.0	3.2
90°-100°	125.4	3.3
100°-110°	194.2	5.0
110°-120°	268.1	7.0
120°-130°	322.1	8.4
130°-140°	345.8	9.0
140°-150°	331.4	8.6
150°-160°	276.7	7.2
160°-170°	183.5	4.8
170°-180°	64.1	1.7
0°-30°	399.6	10.4
0°-40°	657.0	17.1
0°-60°	1202.9	31.2
0°-90°	1741.6	45.2
90°-120°	587.7	15.3
90°-150°	1587.1	41.2
90°-180°	2111.0	54.8
0°-180°	3853.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	515	512	508	512	512	49
15°	491	492	492	499	498	138
25°	446	451	458	467	469	205
35°	384	397	411	428	433	240
45°	315	335	361	384	392	243
55°	242	268	307	334	344	216
65°	165	202	245	276	286	164
75°	92	133	181	213	222	97
85°	27	73	120	152	162	28
90°	8	58	118	147	156	7
95°	36	76	122	150	158	38
105°	127	150	190	217	225	134
115°	232	243	275	297	304	229
125°	334	339	361	380	386	299
135°	431	437	446	461	465	333
145°	522	526	530	535	536	326
155°	597	599	600	603	602	275
165°	650	649	649	653	650	183
175°	676	674	673	677	674	64
180°	677	677	677	677	677	

TEST NUMBER: P998523

CATALOG NUMBER: SA2XXDIP-B485D530UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.1	513.1	513.1	513.1	513.1
2.5°	516.9	514.6	509.4	513.1	511.7
5°	514.6	512.4	507.9	512.4	511.7
7.5°	510.9	509.4	505.7	510.9	510.2
10°	506.5	505.0	502.7	508.7	507.9
12.5°	499.0	499.8	498.3	504.2	503.5
15°	490.8	492.3	492.3	499.0	498.3
17.5°	480.4	483.4	485.6	492.3	492.3
20°	470.0	473.7	476.7	484.9	484.9
22.5°	458.9	463.3	467.8	476.0	477.5
25°	446.2	451.4	458.1	467.0	469.3
27.5°	431.3	439.5	447.0	458.1	459.6
30°	416.5	426.1	435.8	447.7	449.9
32.5°	400.1	411.3	423.2	437.3	441.8
35°	384.5	397.1	411.3	427.6	432.8
37.5°	367.4	381.5	399.4	417.2	422.4
40°	350.3	366.6	386.7	406.1	412.8
42.5°	333.9	350.3	374.1	395.6	402.3
45°	315.3	335.4	361.4	384.5	391.9
47.5°	297.5	319.0	348.8	372.6	380.8
50°	278.9	301.9	335.4	360.7	368.9
52.5°	261.0	285.6	321.3	347.3	356.2
55°	241.7	268.5	307.1	333.9	343.6
57.5°	223.1	252.9	291.5	320.5	330.2
60°	203.0	235.0	277.4	305.7	316.1
62.5°	185.2	218.6	261.0	291.5	301.2
65°	165.1	201.5	245.4	275.9	285.6
67.5°	147.3	185.2	229.8	260.3	270.7
70°	127.9	166.6	212.7	244.7	253.6
72.5°	110.1	150.2	197.1	228.3	239.5
75°	91.5	133.1	180.7	212.7	222.4
77.5°	73.6	116.8	165.1	197.1	207.5
80°	55.8	101.1	149.5	180.7	191.1
82.5°	40.9	85.5	134.6	165.8	175.5
85°	26.8	72.9	120.5	151.7	162.1
87.5°	16.4	61.0	108.6	139.1	148.7
90°	8.0	58.0	118.2	146.8	156.2
92.5°	19.3	63.2	109.2	138.8	147.7
95°	35.6	76.3	122.1	150.4	158.1
97.5°	54.9	92.1	137.4	164.9	173.9
100°	77.8	109.8	153.3	180.8	188.4
102.5°	101.1	129.0	171.5	198.8	206.4
105°	126.6	149.9	189.7	216.9	225.1
107.5°	152.8	173.0	210.2	236.0	241.3
110°	177.3	195.5	232.0	255.8	262.3

TEST NUMBER: P998523

CATALOG NUMBER: SA2XXDIP-B485D530UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	204.7	220.0	253.7	275.7	282.8
115°	231.6	243.2	275.4	297.2	303.7
117.5°	257.6	268.2	296.5	317.1	322.9
120°	284.5	292.0	317.3	338.1	344.6
122.5°	309.0	315.6	340.2	358.6	364.1
125°	334.1	339.2	361.3	379.7	385.8
127.5°	359.2	364.7	382.5	398.8	403.8
130°	382.6	389.3	403.8	420.5	424.2
132.5°	408.9	413.8	425.6	439.8	444.1
135°	431.0	437.3	445.9	460.9	465.1
137.5°	456.1	461.2	466.2	479.7	482.6
140°	478.4	482.8	487.2	499.1	501.2
142.5°	501.2	505.7	507.4	516.9	518.3
145°	522.3	526.3	529.7	534.8	536.2
147.5°	541.7	546.8	549.1	551.0	551.0
150°	561.7	565.1	567.4	569.1	567.4
152.5°	579.4	582.8	585.7	588.0	585.7
155°	597.1	598.8	600.5	603.4	601.7
157.5°	612.5	613.7	614.8	618.8	616.0
160°	626.3	627.4	628.0	631.4	629.1
162.5°	638.8	638.8	639.4	643.4	640.5
165°	649.7	649.1	649.1	653.1	650.3
167.5°	659.4	657.7	657.7	661.7	658.8
170°	666.8	665.1	664.5	668.5	665.1
172.5°	672.0	670.3	669.7	673.7	670.3
175°	676.0	674.3	673.1	677.1	673.7
177.5°	678.3	676.5	675.4	678.8	675.4
180°	677.1	677.1	677.1	677.1	677.1

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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	12.03	12.90	13.02	13.90	15.24	15.11	15.97	16.09	16.98	18.31
	3H	13.49	14.27	14.49	15.29	16.64	17.70	18.48	18.69	19.49	20.85
	4H	13.97	14.71	14.98	15.73	17.09	18.95	19.69	19.96	20.71	22.07
	6H	14.25	14.94	15.27	15.96	17.34	20.25	20.93	21.27	21.96	23.33
	8H	14.31	14.97	15.34	16.01	17.38	20.91	21.56	21.93	22.60	23.97
	12H	14.33	14.95	15.36	15.99	17.38	21.63	22.26	22.66	23.29	24.69
4H	2H	13.08	13.83	14.10	14.84	16.21	15.44	16.18	16.45	17.20	18.56
	3H	14.79	15.42	15.81	16.47	17.84	18.23	18.86	19.25	19.90	21.28
	4H	15.41	15.99	16.44	17.03	18.43	19.64	20.23	20.68	21.26	22.66
	6H	15.83	16.33	16.87	17.39	18.79	21.11	21.62	22.15	22.68	24.07
	8H	15.94	16.41	16.98	17.46	18.87	21.87	22.34	22.91	23.40	24.81
	12H	15.98	16.41	17.04	17.48	18.89	22.70	23.13	23.76	24.20	25.61
8H	4H	16.20	16.68	17.24	17.73	19.14	19.79	20.26	20.83	21.32	22.73
	6H	16.84	17.23	17.90	18.33	19.73	21.42	21.82	22.48	22.91	24.32
	8H	17.06	17.41	18.13	18.49	19.91	22.31	22.66	23.38	23.74	25.16
	12H	17.19	17.50	18.27	18.58	20.04	23.30	23.61	24.38	24.69	26.15
12H	4H	16.40	16.83	17.46	17.90	19.31	19.76	20.19	20.82	21.26	22.68
	6H	17.17	17.52	18.24	18.60	20.03	21.44	21.80	22.52	22.87	24.30
	8H	17.47	17.79	18.55	18.86	20.32	22.37	22.68	23.45	23.76	25.22