

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: P997743

Luminaire Tested: SA2XXRDP-B485DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997743
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B485DB50-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

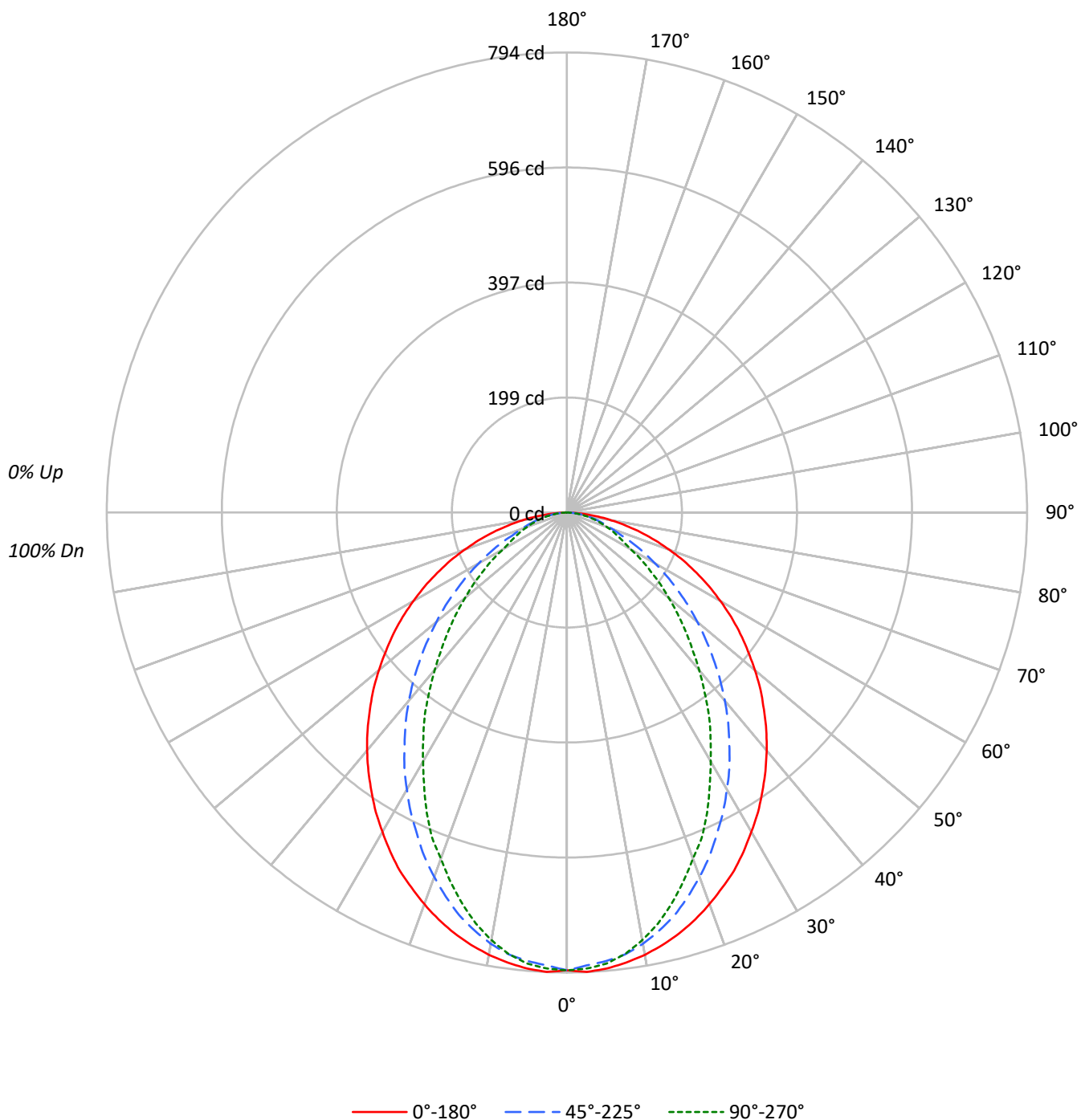
Lumens per Lamp: N/A
Luminaire Lumens: 1625.0 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12507	12507	12507
5°	12554	12351	12418
10°	12459	12148	12045
15°	12315	11788	11448
20°	12117	11274	10708
25°	11915	10691	9990
30°	11632	10090	9070
35°	11359	9438	8263
40°	11082	8761	7329
45°	10756	8003	6483
50°	10424	7238	5652
55°	10084	6414	4854
60°	9688	5547	4030
65°	9240	4659	3671
70°	8706	3837	3374
75°	8049	3498	3150
80°	7101	3127	2871
85°	5576	2470	2470

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10756 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	4.6
10°-20°	203.3	12.5
20°-30°	285.4	17.6
30°-40°	311.1	19.1
40°-50°	285.9	17.6
50°-60°	224.6	13.8
60°-70°	146.2	9.0
70°-80°	75.2	4.6
80°-90°	19.2	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	562.8	34.6
0°-40°	873.9	53.8
0°-60°	1384.4	85.2
0°-90°	1625.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1625.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	790	790	790	790	790	
5°	790	787	777	784	782	75
15°	752	744	719	706	699	212
25°	682	659	612	583	572	314
35°	588	551	488	443	428	368
45°	480	433	358	307	290	371
55°	365	310	232	190	176	326
65°	247	189	124	100	98	245
75°	132	82	57	52	52	139
85°	31	16	14	14	14	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	790.1	790.1	790.1	790.1	790.1
2.5°	793.7	790.1	782.3	789.4	788.0
5°	790.1	786.6	777.3	783.7	781.5
7.5°	783.7	779.4	769.4	772.3	768.7
10°	775.1	770.1	755.8	753.7	749.4
12.5°	764.4	758.0	738.6	734.4	726.5
15°	751.5	743.6	719.3	705.8	698.6
17.5°	736.5	725.1	695.0	679.3	667.9
20°	719.3	705.0	669.3	651.4	635.7
22.5°	700.7	684.3	642.8	618.5	607.8
25°	682.2	659.3	612.1	582.8	572.0
27.5°	660.0	635.7	583.5	549.9	533.4
30°	636.4	609.2	552.0	515.5	496.2
32.5°	613.5	580.6	522.0	479.1	461.2
35°	587.8	551.3	488.4	443.3	427.6
37.5°	562.7	523.4	456.9	407.6	389.7
40°	536.3	493.4	424.0	373.3	354.7
42.5°	509.1	463.4	391.1	338.2	320.3
45°	480.5	432.6	357.5	306.8	289.6
47.5°	453.3	402.6	325.3	274.6	258.8
50°	423.3	372.5	293.9	244.5	229.5
52.5°	394.0	340.4	263.9	216.7	203.1
55°	365.4	309.6	232.4	189.5	175.9
57.5°	336.1	278.9	204.5	164.5	153.0
60°	306.0	248.8	175.2	138.7	127.3
62.5°	276.7	219.5	150.2	115.8	110.1
65°	246.7	188.8	124.4	100.1	98.0
67.5°	218.1	160.2	100.1	88.0	85.8
70°	188.1	132.3	82.9	75.8	72.9
72.5°	159.5	106.5	69.4	63.6	62.2
75°	131.6	81.5	57.2	52.2	51.5
77.5°	103.7	57.9	45.0	42.2	40.8
80°	77.9	41.5	34.3	31.5	31.5
82.5°	54.3	27.9	23.6	22.2	22.2
85°	30.7	15.7	13.6	13.6	13.6
87.5°	11.4	5.7	5.7	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

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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	20.01	21.53	20.38	21.85	22.16	15.97	17.49	16.34	17.81	18.12
	3H	21.78	23.14	22.16	23.47	23.83	17.24	18.60	17.62	18.93	19.29
	4H	22.44	23.72	22.84	24.07	24.45	17.74	19.02	18.14	19.37	19.75
	6H	22.93	24.12	23.35	24.48	24.87	18.12	19.30	18.53	19.67	20.06
	8H	23.10	24.22	23.52	24.61	25.02	18.25	19.37	18.67	19.76	20.16
	12H	23.20	24.28	23.63	24.66	25.09	18.33	19.41	18.76	19.79	20.22
4H	2H	20.12	21.40	20.52	21.75	22.12	16.67	17.95	17.07	18.30	18.68
	3H	22.05	23.11	22.46	23.51	23.91	18.11	19.17	18.52	19.57	19.98
	4H	22.80	23.76	23.23	24.17	24.61	18.71	19.67	19.14	20.08	20.52
	6H	23.39	24.22	23.85	24.67	25.13	19.20	20.03	19.66	20.47	20.93
	8H	23.61	24.38	24.07	24.83	25.29	19.36	20.14	19.83	20.58	21.05
	12H	23.76	24.45	24.24	24.93	25.40	19.48	20.17	19.96	20.65	21.12
8H	4H	22.82	23.60	23.29	24.04	24.51	19.06	19.84	19.53	20.29	20.75
	6H	23.46	24.10	23.96	24.59	25.07	19.65	20.29	20.15	20.79	21.26
	8H	23.71	24.29	24.22	24.80	25.29	19.87	20.45	20.39	20.96	21.45
	12H	23.91	24.42	24.42	24.92	25.48	20.05	20.56	20.56	21.06	21.62
12H	4H	22.81	23.50	23.29	23.98	24.45	19.11	19.80	19.59	20.28	20.75
	6H	23.44	24.02	23.96	24.53	25.02	19.72	20.29	20.23	20.80	21.29
	8H	23.73	24.24	24.24	24.73	25.29	19.99	20.50	20.50	20.99	21.56