

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: P997596

Luminaire Tested: SA2XXDP-B485DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDP-B485DB27-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

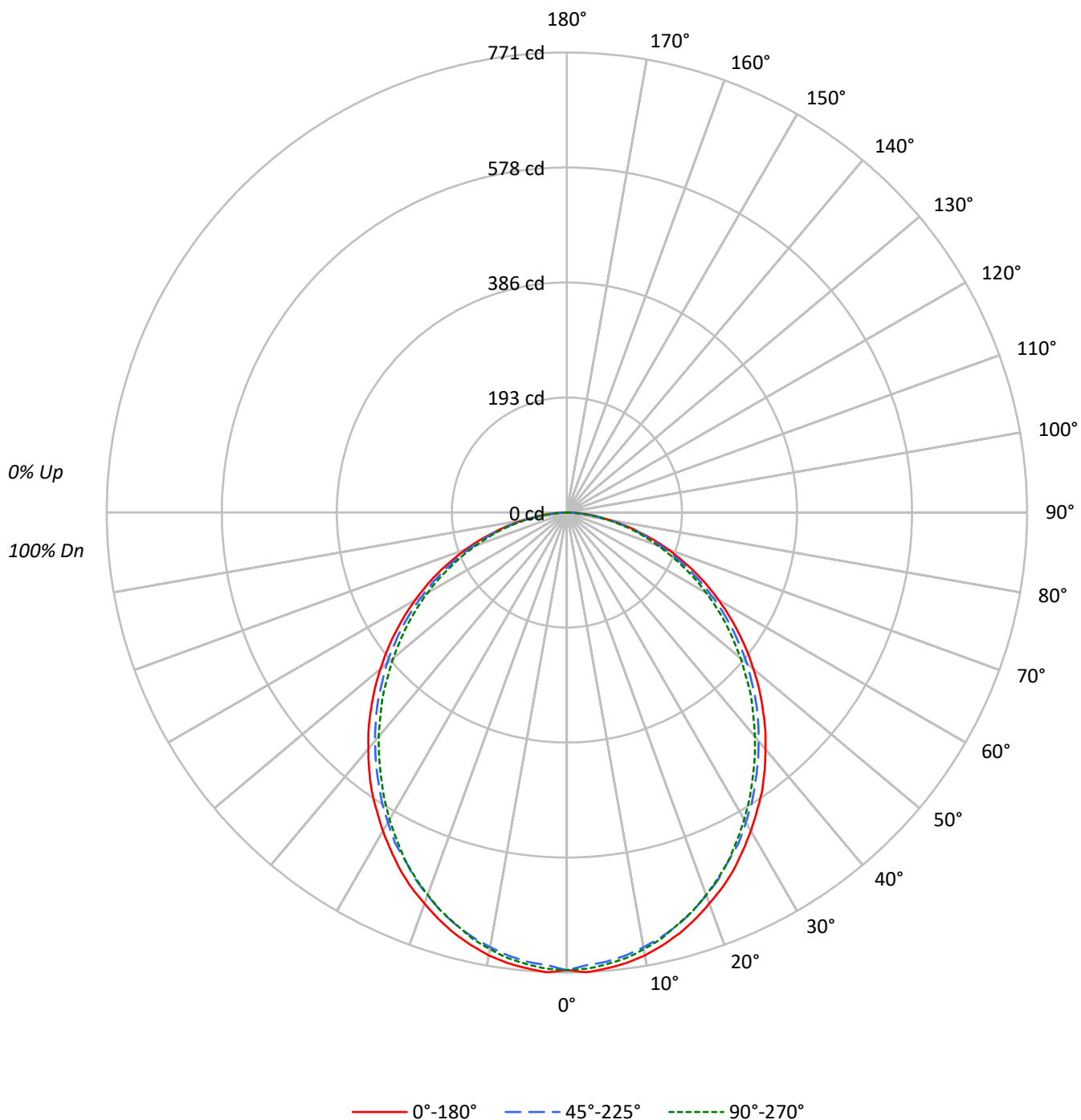
Lumens per Lamp: N/A
Luminaire Lumens: 1951.0 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	73	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	62	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	54	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	47	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	41	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	37	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	33	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	30	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	27	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12139	12139	12139
5°	12186	12009	12079
10°	12113	11888	11947
15°	11963	11734	11720
20°	11750	11502	11490
25°	11540	11216	11216
30°	11267	10958	10863
35°	11015	10644	10487
40°	10696	10330	10131
45°	10383	10020	9771
50°	10042	9698	9350
55°	9687	9320	8975
60°	9292	8871	8545
65°	8866	8424	8038
70°	8326	7882	7507
75°	7578	7260	7082
80°	6718	6518	6180
85°	5485	5231	4686

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10383 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	3.7
10°-20°	203.1	10.4
20°-30°	298.4	15.3
30°-40°	346.6	17.8
40°-50°	346.2	17.7
50°-60°	301.9	15.5
60°-70°	223.1	11.4
70°-80°	126.3	6.5
80°-90°	33.3	1.7
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°	573.7	29.4
0°-40°	920.3	47.2
0°-60°	1568.3	80.4
0°-90°	1951.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1951.0	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	35
90°	0	0	0	0	0	

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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°	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	19.95	21.57	20.32	21.88	22.19	19.51	21.12	19.88	21.44	21.75
	3H	21.71	23.16	22.08	23.49	23.85	21.22	22.67	21.59	23.00	23.36
	4H	22.35	23.72	22.75	24.07	24.44	21.86	23.23	22.26	23.57	23.95
	6H	22.82	24.09	23.23	24.45	24.84	22.32	23.59	22.73	23.95	24.34
	8H	22.96	24.17	23.39	24.56	24.96	22.46	23.67	22.89	24.06	24.46
	12H	23.05	24.21	23.48	24.60	25.02	22.54	23.70	22.97	24.08	24.51
4H	2H	20.52	21.88	20.91	22.23	22.61	20.16	21.53	20.56	21.88	22.26
	3H	22.49	23.64	22.90	24.03	24.43	22.08	23.23	22.49	23.63	24.03
	4H	23.27	24.30	23.70	24.72	25.15	22.84	23.88	23.28	24.29	24.73
	6H	23.86	24.77	24.32	25.21	25.67	23.43	24.34	23.89	24.78	25.23
	8H	24.05	24.90	24.51	25.34	25.81	23.62	24.46	24.08	24.91	25.37
	12H	24.18	24.94	24.67	25.42	25.89	23.73	24.49	24.21	24.97	25.44
8H	4H	23.54	24.39	24.00	24.83	25.30	23.17	24.01	23.63	24.46	24.92
	6H	24.26	24.96	24.75	25.45	25.92	23.87	24.58	24.37	25.07	25.54
	8H	24.51	25.14	25.02	25.65	26.14	24.12	24.75	24.63	25.26	25.75
	12H	24.71	25.27	25.22	25.76	26.32	24.30	24.86	24.81	25.35	25.91
12H	4H	23.57	24.33	24.05	24.80	25.27	23.20	23.96	23.68	24.44	24.91
	6H	24.30	24.93	24.81	25.44	25.93	23.93	24.56	24.44	25.07	25.56
	8H	24.61	25.17	25.12	25.66	26.22	24.24	24.80	24.74	25.29	25.85