

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: P997614

Luminaire Tested: SA2XXDP-B485DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997614
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-B485DB30-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

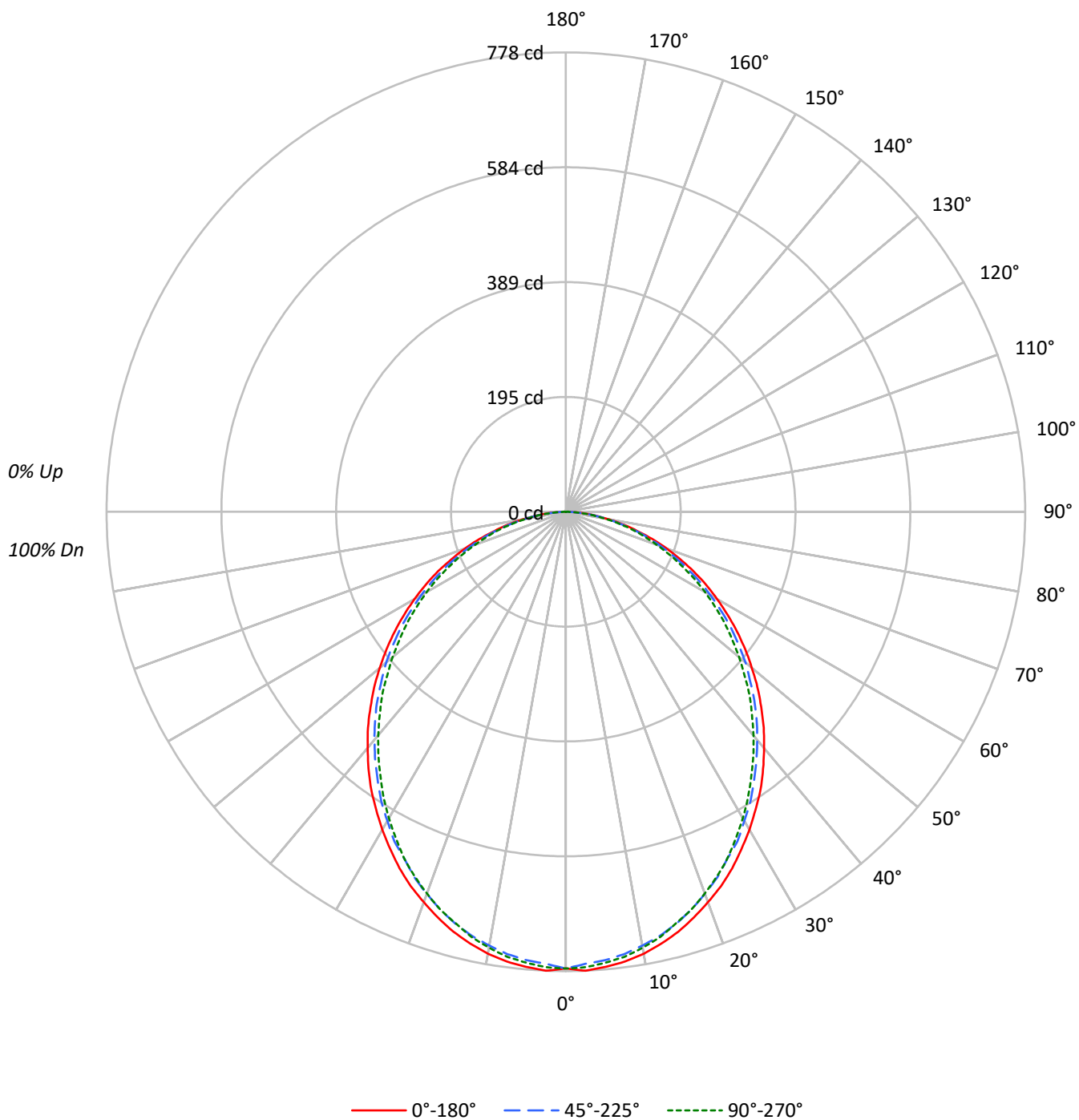
Lumens per Lamp: N/A
Luminaire Lumens: 1968.0 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12244	12244	12244
5°	12291	12114	12184
10°	12217	11991	12050
15°	12066	11835	11824
20°	11852	11601	11589
25°	11639	11314	11314
30°	11365	11053	10958
35°	11109	10736	10578
40°	10789	10421	10220
45°	10472	10107	9857
50°	10129	9781	9432
55°	9770	9402	9052
60°	9371	8947	8617
65°	8944	8499	8105
70°	8400	7951	7572
75°	7645	7321	7143
80°	6782	6572	6235
85°	5539	5267	4722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10472 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.8	3.7
10°-20°	204.8	10.4
20°-30°	301.0	15.3
30°-40°	349.6	17.8
40°-50°	349.2	17.7
50°-60°	304.5	15.5
60°-70°	225.1	11.4
70°-80°	127.3	6.5
80°-90°	33.6	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°	578.7	29.4
0°-40°	928.3	47.2
0°-60°	1582.0	80.4
0°-90°	1968.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1968.0	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	36
90°	0	0	0	0	0	

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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°	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	19.99	21.60	20.35	21.91	22.22	19.54	21.15	19.91	21.47	21.78
	3H	21.74	23.19	22.11	23.52	23.88	21.24	22.70	21.62	23.03	23.39
	4H	22.38	23.75	22.78	24.10	24.48	21.89	23.26	22.29	23.60	23.98
	6H	22.85	24.12	23.26	24.48	24.88	22.35	23.62	22.76	23.98	24.37
	8H	22.99	24.21	23.42	24.59	24.99	22.49	23.70	22.92	24.09	24.49
	12H	23.09	24.25	23.51	24.63	25.06	22.57	23.73	23.00	24.11	24.54
4H	2H	20.55	21.92	20.94	22.26	22.64	20.19	21.56	20.59	21.91	22.29
	3H	22.52	23.67	22.93	24.07	24.47	22.11	23.26	22.52	23.66	24.06
	4H	23.30	24.33	23.73	24.75	25.18	22.87	23.91	23.31	24.32	24.76
	6H	23.89	24.80	24.35	25.24	25.70	23.46	24.37	23.92	24.81	25.26
	8H	24.08	24.93	24.54	25.37	25.84	23.65	24.49	24.11	24.93	25.40
	12H	24.22	24.98	24.70	25.45	25.92	23.76	24.52	24.24	25.00	25.47
8H	4H	23.57	24.42	24.03	24.86	25.33	23.20	24.04	23.66	24.49	24.95
	6H	24.29	24.99	24.78	25.48	25.95	23.90	24.61	24.40	25.10	25.57
	8H	24.54	25.18	25.05	25.68	26.17	24.15	24.78	24.66	25.29	25.78
	12H	24.75	25.30	25.25	25.79	26.35	24.33	24.89	24.84	25.38	25.94
12H	4H	23.60	24.36	24.08	24.83	25.30	23.23	23.99	23.71	24.47	24.94
	6H	24.33	24.96	24.84	25.47	25.96	23.96	24.59	24.47	25.10	25.59
	8H	24.64	25.20	25.15	25.69	26.25	24.27	24.82	24.77	25.32	25.88