

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: P997623

Luminaire Tested: SA2XXDP-B485DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997623
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-B485DB50-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

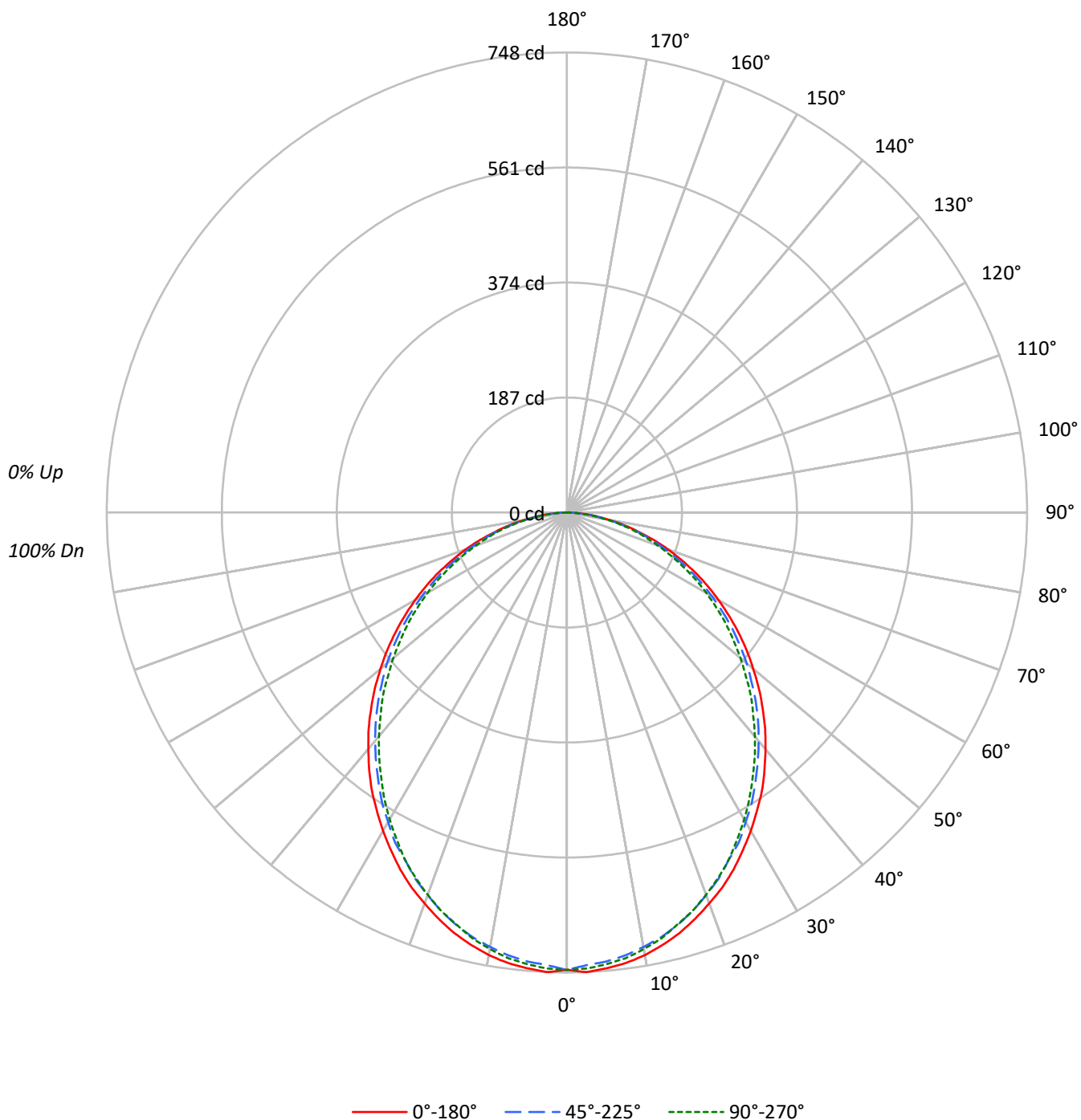
Lumens per Lamp: N/A
Luminaire Lumens: 1892.0 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	11772	11772	11772
5°	11817	11646	11714
10°	11746	11528	11586
15°	11601	11378	11366
20°	11394	11153	11141
25°	11190	10878	10878
30°	10927	10625	10534
35°	10680	10323	10170
40°	10373	10018	9826
45°	10069	9716	9476
50°	9737	9402	9070
55°	9394	9038	8701
60°	9010	8602	8285
65°	8596	8169	7794
70°	8076	7646	7280
75°	7345	7039	6868
80°	6518	6326	5998
85°	5321	5067	4541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10069 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	3.7
10°-20°	196.9	10.4
20°-30°	289.4	15.3
30°-40°	336.1	17.8
40°-50°	335.7	17.7
50°-60°	292.7	15.5
60°-70°	216.4	11.4
70°-80°	122.4	6.5
80°-90°	32.3	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°	556.3	29.4
0°-40°	892.4	47.2
0°-60°	1520.9	80.4
0°-90°	1892.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1892.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	744	741	733	739	737	71
15°	708	704	694	697	694	199
25°	641	635	623	624	623	295
35°	553	546	534	530	526	345
45°	450	445	434	426	423	347
55°	340	336	328	319	315	304
65°	230	225	218	212	208	227
75°	120	119	115	111	112	128
85°	29	29	28	26	25	34
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	743.7	743.7	743.7	743.7	743.7
2.5°	748.0	744.4	736.5	743.7	742.2
5°	743.7	740.8	732.9	738.7	737.2
7.5°	738.7	734.4	726.5	732.2	730.8
10°	730.8	725.8	717.2	722.9	720.8
12.5°	720.1	715.8	707.2	710.8	709.3
15°	707.9	703.6	694.3	697.2	693.6
17.5°	692.9	688.6	679.3	682.9	679.3
20°	676.4	672.2	662.1	664.3	661.4
22.5°	660.0	653.6	644.3	644.3	642.8
25°	640.7	635.0	622.8	624.2	622.8
27.5°	619.2	614.2	604.9	602.8	599.2
30°	597.8	592.1	581.3	579.2	576.3
32.5°	574.9	570.6	559.2	554.9	552.0
35°	552.7	545.6	534.2	529.9	526.3
37.5°	527.7	521.3	509.8	504.8	501.3
40°	502.0	496.3	484.8	478.4	475.5
42.5°	476.9	471.2	459.8	452.6	448.3
45°	449.8	444.8	434.0	426.2	423.3
47.5°	423.3	418.3	406.9	399.0	394.7
50°	395.4	391.9	381.8	371.8	368.3
52.5°	368.3	363.3	354.0	346.1	341.1
55°	340.4	336.1	327.5	318.9	315.3
57.5°	312.5	308.9	299.6	291.0	288.2
60°	284.6	281.7	271.7	263.9	261.7
62.5°	257.4	252.4	245.3	238.1	235.3
65°	229.5	225.2	218.1	211.7	208.1
67.5°	200.9	197.4	190.9	185.9	183.1
70°	174.5	171.6	165.2	160.2	157.3
72.5°	147.3	144.4	140.9	135.9	133.7
75°	120.1	118.7	115.1	110.8	112.3
77.5°	95.8	93.0	91.5	89.4	87.2
80°	71.5	70.8	69.4	67.2	65.8
82.5°	48.6	48.6	47.9	45.0	45.0
85°	29.3	28.6	27.9	25.7	25.0
87.5°	12.9	11.4	10.0	7.9	7.2
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	19.85	21.46	20.21	21.77	22.09	19.40	21.02	19.77	21.33	21.64
	3H	21.60	23.05	21.98	23.38	23.74	21.11	22.56	21.49	22.89	23.25
	4H	22.25	23.61	22.64	23.96	24.34	21.75	23.12	22.15	23.47	23.84
	6H	22.71	23.98	23.13	24.35	24.74	22.21	23.48	22.62	23.85	24.24
	8H	22.86	24.07	23.28	24.46	24.86	22.35	23.57	22.78	23.95	24.35
	12H	22.95	24.11	23.38	24.49	24.92	22.44	23.60	22.86	23.98	24.41
4H	2H	20.41	21.78	20.81	22.13	22.50	20.06	21.43	20.46	21.77	22.15
	3H	22.38	23.53	22.79	23.93	24.33	21.98	23.12	22.39	23.52	23.92
	4H	23.16	24.20	23.59	24.61	25.05	22.74	23.77	23.17	24.19	24.62
	6H	23.76	24.66	24.21	25.10	25.56	23.33	24.23	23.78	24.67	25.13
	8H	23.95	24.79	24.41	25.24	25.70	23.51	24.36	23.97	24.80	25.26
	12H	24.08	24.84	24.56	25.31	25.78	23.63	24.39	24.11	24.86	25.33
8H	4H	23.43	24.28	23.90	24.72	25.19	23.06	23.91	23.52	24.35	24.81
	6H	24.15	24.85	24.64	25.34	25.82	23.77	24.47	24.26	24.96	25.43
	8H	24.41	25.04	24.92	25.55	26.03	24.02	24.65	24.53	25.15	25.64
	12H	24.61	25.17	25.11	25.66	26.22	24.19	24.75	24.70	25.24	25.80
12H	4H	23.46	24.22	23.94	24.70	25.17	23.10	23.86	23.58	24.33	24.80
	6H	24.19	24.83	24.70	25.33	25.82	23.83	24.46	24.34	24.96	25.45
	8H	24.51	25.07	25.01	25.56	26.12	24.13	24.69	24.64	25.18	25.74

END OF REPORT