

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: P997587

Luminaire Tested: SA2XXDP-B290DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997587
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-B290DB35-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

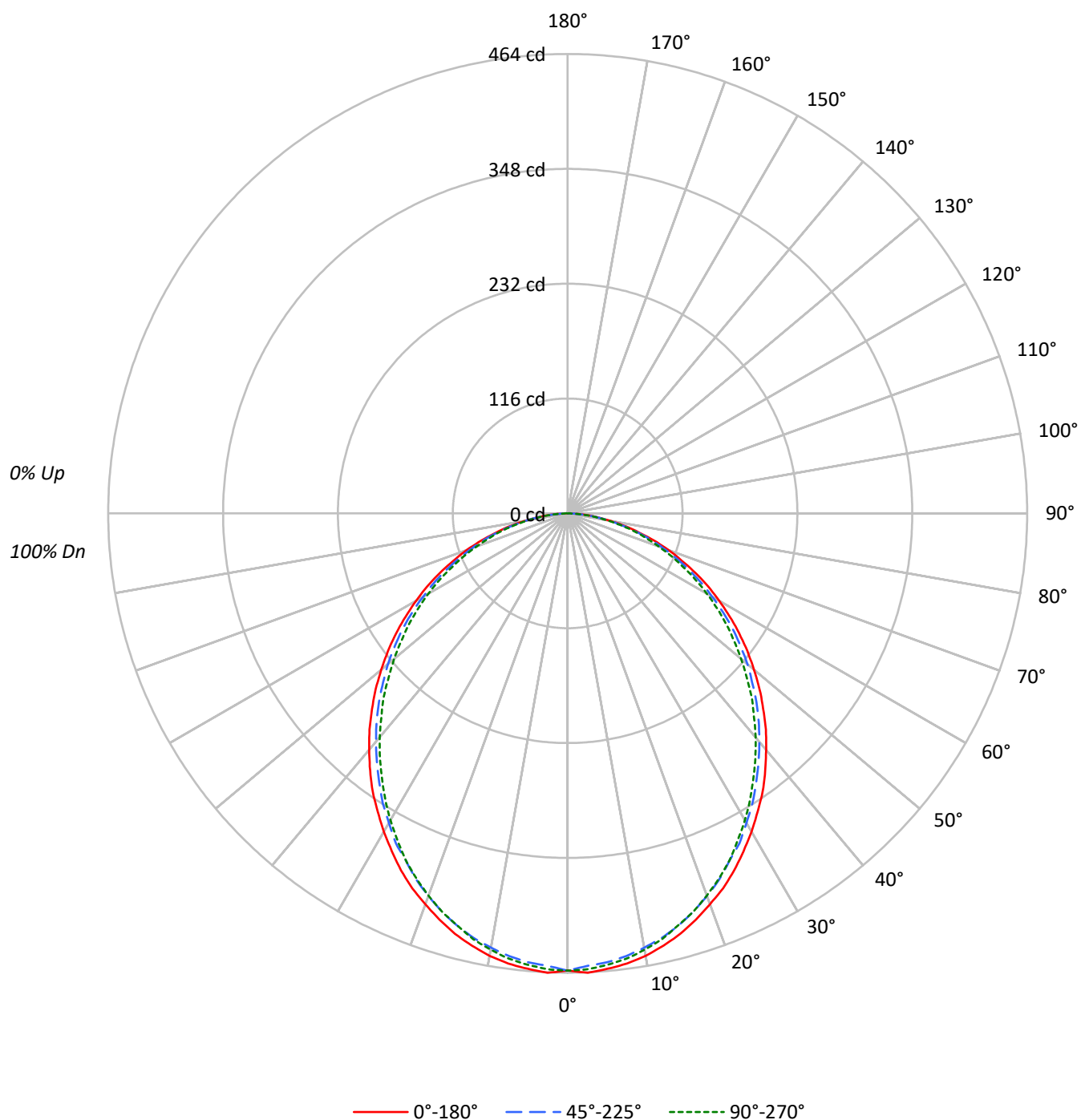
Lumens per Lamp: N/A
Luminaire Lumens: 1175.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
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°	7310	7310	7310
5°	7338	7233	7274
10°	7294	7159	7194
15°	7204	7066	7060
20°	7077	6927	6920
25°	6950	6756	6756
30°	6785	6598	6542
35°	6634	6410	6315
40°	6441	6222	6102
45°	6252	6035	5885
50°	6048	5839	5632
55°	5834	5613	5404
60°	5594	5341	5145
65°	5337	5071	4839
70°	5017	4749	4522
75°	4563	4373	4263
80°	4047	3929	3728
85°	3305	3142	2815

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6252 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	3.7
10°-20°	122.3	10.4
20°-30°	179.7	15.3
30°-40°	208.7	17.8
40°-50°	208.5	17.7
50°-60°	181.8	15.5
60°-70°	134.4	11.4
70°-80°	76.0	6.5
80°-90°	20.1	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°	345.5	29.4
0°-40°	554.2	47.2
0°-60°	944.5	80.4
0°-90°	1175.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1175.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	462	460	455	459	458	44
15°	440	437	431	433	431	124
25°	398	394	387	388	387	183
35°	343	339	332	329	327	214
45°	279	276	270	265	263	216
55°	211	209	203	198	196	189
65°	142	140	135	131	129	141
75°	75	74	72	69	70	80
85°	18	18	17	16	16	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.8	461.8	461.8	461.8	461.8
2.5°	464.5	462.3	457.4	461.8	461.0
5°	461.8	460.1	455.2	458.7	457.8
7.5°	458.7	456.1	451.2	454.7	453.8
10°	453.8	450.7	445.4	449.0	447.6
12.5°	447.2	444.5	439.2	441.4	440.5
15°	439.6	437.0	431.2	433.0	430.8
17.5°	430.3	427.6	421.9	424.1	421.9
20°	420.1	417.4	411.2	412.5	410.8
22.5°	409.9	405.9	400.1	400.1	399.2
25°	397.9	394.3	386.8	387.7	386.8
27.5°	384.6	381.5	375.7	374.4	372.1
30°	371.2	367.7	361.0	359.7	357.9
32.5°	357.0	354.4	347.3	344.6	342.8
35°	343.3	338.8	331.7	329.1	326.8
37.5°	327.7	323.7	316.6	313.5	311.3
40°	311.7	308.2	301.1	297.1	295.3
42.5°	296.2	292.6	285.5	281.1	278.4
45°	279.3	276.2	269.6	264.7	262.9
47.5°	262.9	259.8	252.7	247.8	245.1
50°	245.6	243.4	237.1	230.9	228.7
52.5°	228.7	225.6	219.8	214.9	211.8
55°	211.4	208.7	203.4	198.1	195.8
57.5°	194.1	191.8	186.1	180.7	179.0
60°	176.7	175.0	168.7	163.9	162.5
62.5°	159.9	156.8	152.3	147.9	146.1
65°	142.5	139.9	135.4	131.4	129.2
67.5°	124.8	122.6	118.6	115.5	113.7
70°	108.4	106.6	102.6	99.5	97.7
72.5°	91.5	89.7	87.5	84.4	83.0
75°	74.6	73.7	71.5	68.8	69.7
77.5°	59.5	57.7	56.8	55.5	54.2
80°	44.4	44.0	43.1	41.7	40.9
82.5°	30.2	30.2	29.8	28.0	28.0
85°	18.2	17.8	17.3	16.0	15.5
87.5°	8.0	7.1	6.2	4.9	4.4
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	18.19	19.80	18.56	20.12	20.43	17.75	19.36	18.11	19.67	19.99
	3H	19.94	21.40	20.32	21.73	22.09	19.45	20.91	19.83	21.23	21.59
	4H	20.59	21.96	20.99	22.31	22.68	20.10	21.46	20.49	21.81	22.19
	6H	21.06	22.33	21.47	22.69	23.08	20.56	21.83	20.97	22.19	22.58
	8H	21.20	22.41	21.63	22.80	23.20	20.70	21.91	21.12	22.30	22.70
	12H	21.29	22.45	21.72	22.83	23.26	20.78	21.94	21.21	22.32	22.75
4H	2H	18.75	20.12	19.15	20.47	20.85	18.40	19.77	18.80	20.12	20.49
	3H	20.73	21.88	21.14	22.27	22.67	20.32	21.47	20.73	21.87	22.27
	4H	21.51	22.54	21.94	22.96	23.39	21.08	22.12	21.51	22.53	22.97
	6H	22.10	23.01	22.56	23.45	23.90	21.67	22.57	22.12	23.02	23.47
	8H	22.29	23.14	22.75	23.58	24.05	21.85	22.70	22.31	23.14	23.61
	12H	22.42	23.18	22.90	23.66	24.13	21.97	22.73	22.45	23.21	23.68
8H	4H	21.78	22.63	22.24	23.07	23.53	21.40	22.25	21.87	22.69	23.16
	6H	22.49	23.20	22.99	23.69	24.16	22.11	22.81	22.61	23.30	23.78
	8H	22.75	23.38	23.26	23.89	24.38	22.36	22.99	22.87	23.50	23.98
	12H	22.95	23.51	23.46	24.00	24.56	22.54	23.10	23.05	23.59	24.15
12H	4H	21.81	22.57	22.29	23.04	23.51	21.44	22.20	21.92	22.68	23.15
	6H	22.54	23.17	23.05	23.68	24.16	22.17	22.80	22.68	23.31	23.80
	8H	22.85	23.41	23.36	23.90	24.46	22.48	23.03	22.98	23.52	24.08