

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: P997713

Luminaire Tested: SA2XXRDP-B290DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997713
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-B290DB2750-4F0-XX-W2A-F_3500K
Description: Define 2 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

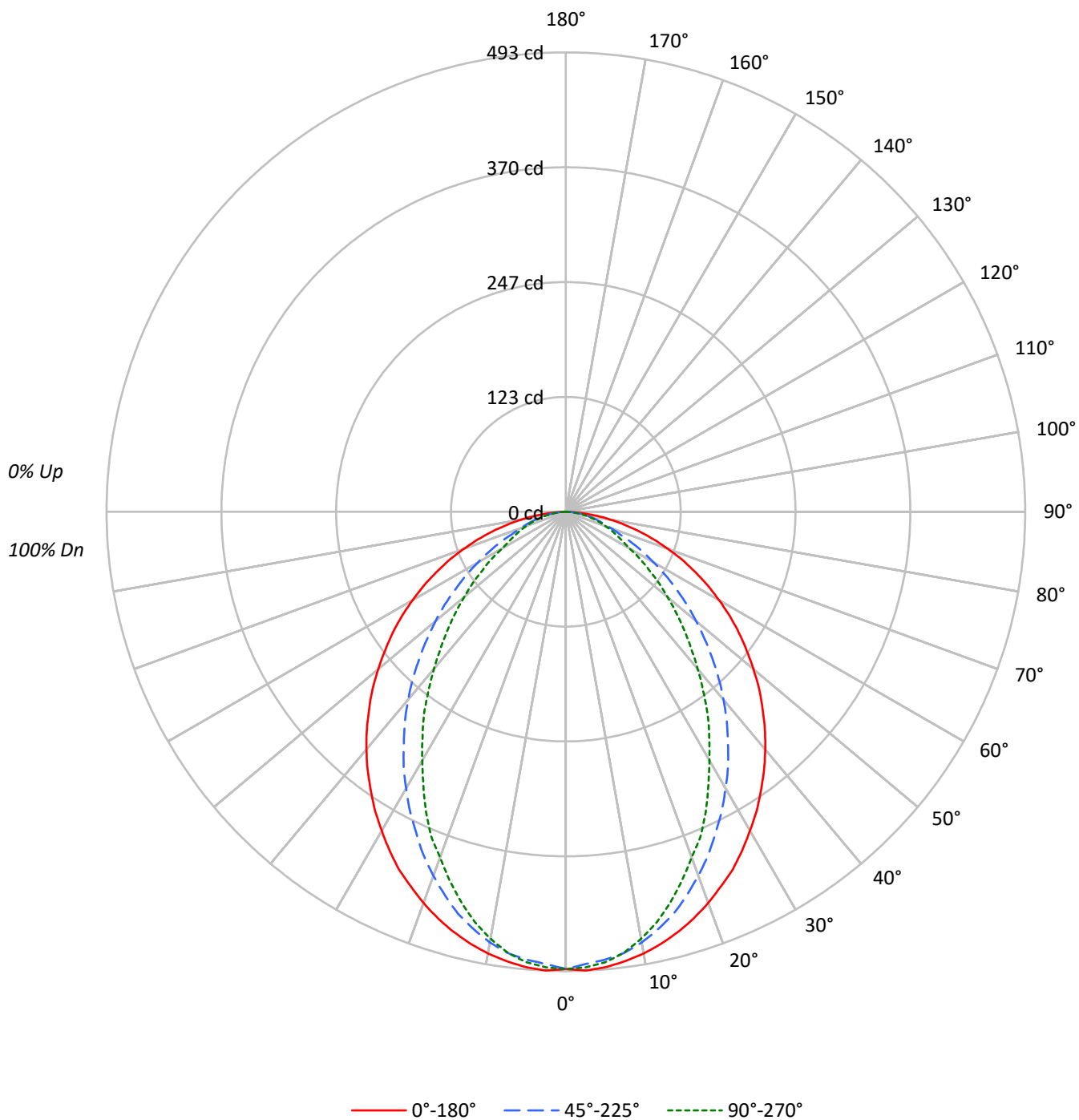
Lumens per Lamp: N/A
Luminaire Lumens: 1009.0 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	30	10	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74		
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64		
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55		
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49		
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43		
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39		
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35		
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32		
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7766	7766	7766
5°	7796	7668	7711
10°	7736	7543	7479
15°	7646	7320	7109
20°	7525	7001	6649
25°	7398	6639	6204
30°	7223	6266	5631
35°	7053	5859	5131
40°	6881	5441	4550
45°	6680	4970	4025
50°	6472	4494	3509
55°	6262	3982	3014
60°	6015	3444	2501
65°	5738	2895	2277
70°	5406	2384	2097
75°	4997	2171	1957
80°	4412	1942	1778
85°	3469	1526	1526

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	4.6
10°-20°	126.2	12.5
20°-30°	177.2	17.6
30°-40°	193.2	19.1
40°-50°	177.6	17.6
50°-60°	139.4	13.8
60°-70°	90.8	9.0
70°-80°	46.7	4.6
80°-90°	11.9	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°	349.4	34.6
0°-40°	542.6	53.8
0°-60°	859.6	85.2
0°-90°	1009.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1009.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	491	488	483	487	485	47
15°	467	462	447	438	434	131
25°	424	409	380	362	355	195
35°	365	342	303	275	266	228
45°	298	269	222	190	180	230
55°	227	192	144	118	109	203
65°	153	117	77	62	61	152
75°	82	51	36	32	32	86
85°	19	10	8	8	8	23
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	490.6	490.6	490.6	490.6	490.6
2.5°	492.8	490.6	485.7	490.2	489.3
5°	490.6	488.4	482.6	486.6	485.3
7.5°	486.6	483.9	477.7	479.5	477.3
10°	481.3	478.2	469.3	468.0	465.3
12.5°	474.6	470.6	458.6	456.0	451.1
15°	466.6	461.7	446.7	438.2	433.8
17.5°	457.3	450.2	431.6	421.8	414.7
20°	446.7	437.8	415.6	404.5	394.7
22.5°	435.1	424.9	399.1	384.1	377.4
25°	423.6	409.4	380.1	361.9	355.2
27.5°	409.8	394.7	362.3	341.4	331.2
30°	395.2	378.3	342.8	320.1	308.1
32.5°	380.9	360.5	324.1	297.5	286.4
35°	365.0	342.3	303.2	275.3	265.5
37.5°	349.4	325.0	283.7	253.1	242.0
40°	333.0	306.4	263.3	231.8	220.2
42.5°	316.1	287.7	242.9	210.0	198.9
45°	298.4	268.6	222.0	190.5	179.8
47.5°	281.5	250.0	202.0	170.5	160.7
50°	262.8	231.3	182.5	151.8	142.5
52.5°	244.6	211.3	163.8	134.5	126.1
55°	226.9	192.2	144.3	117.7	109.2
57.5°	208.7	173.2	127.0	102.1	95.0
60°	190.0	154.5	108.8	86.1	79.0
62.5°	171.8	136.3	93.2	71.9	68.4
65°	153.2	117.2	77.3	62.2	60.8
67.5°	135.4	99.5	62.2	54.6	53.3
70°	116.8	82.1	51.5	47.1	45.3
72.5°	99.0	66.2	43.1	39.5	38.6
75°	81.7	50.6	35.5	32.4	32.0
77.5°	64.4	36.0	28.0	26.2	25.3
80°	48.4	25.8	21.3	19.5	19.5
82.5°	33.7	17.3	14.7	13.8	13.8
85°	19.1	9.8	8.4	8.4	8.4
87.5°	7.1	3.6	3.6	3.1	3.1
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	18.36	19.88	18.72	20.19	20.51	14.31	15.84	14.68	16.15	16.46
	3H	20.12	21.49	20.50	21.82	22.18	15.58	16.95	15.96	17.27	17.64
	4H	20.79	22.07	21.19	22.42	22.80	16.08	17.36	16.48	17.71	18.09
	6H	21.28	22.46	21.69	22.83	23.22	16.46	17.65	16.88	18.01	18.41
	8H	21.44	22.57	21.87	22.96	23.36	16.59	17.72	17.02	18.10	18.51
	12H	21.55	22.62	21.98	23.01	23.44	16.67	17.75	17.10	18.13	18.56
4H	2H	18.46	19.74	18.86	20.09	20.47	15.01	16.29	15.41	16.64	17.02
	3H	20.39	21.46	20.81	21.86	22.26	16.46	17.52	16.87	17.92	18.32
	4H	21.14	22.10	21.58	22.52	22.95	17.06	18.01	17.49	18.43	18.87
	6H	21.74	22.57	22.19	23.01	23.47	17.54	18.37	18.00	18.82	19.28
	8H	21.95	22.73	22.41	23.17	23.64	17.70	18.48	18.17	18.93	19.39
	12H	22.10	22.80	22.59	23.28	23.75	17.82	18.52	18.30	18.99	19.47
8H	4H	21.17	21.95	21.63	22.39	22.86	17.41	18.19	17.87	18.63	19.10
	6H	21.81	22.45	22.30	22.94	23.42	17.99	18.64	18.49	19.13	19.61
	8H	22.06	22.63	22.57	23.14	23.63	18.22	18.79	18.73	19.30	19.79
	12H	22.26	22.77	22.77	23.26	23.83	18.40	18.91	18.91	19.40	19.96
12H	4H	21.15	21.85	21.63	22.33	22.80	17.45	18.15	17.93	18.63	19.10
	6H	21.79	22.36	22.30	22.87	23.36	18.06	18.64	18.57	19.15	19.63
	8H	22.07	22.58	22.58	23.07	23.64	18.33	18.84	18.84	19.33	19.90

END OF REPORT