

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: P997712

Luminaire Tested: SA2XXRDP-B290DB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997712
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_3000K
Description: Define 2 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

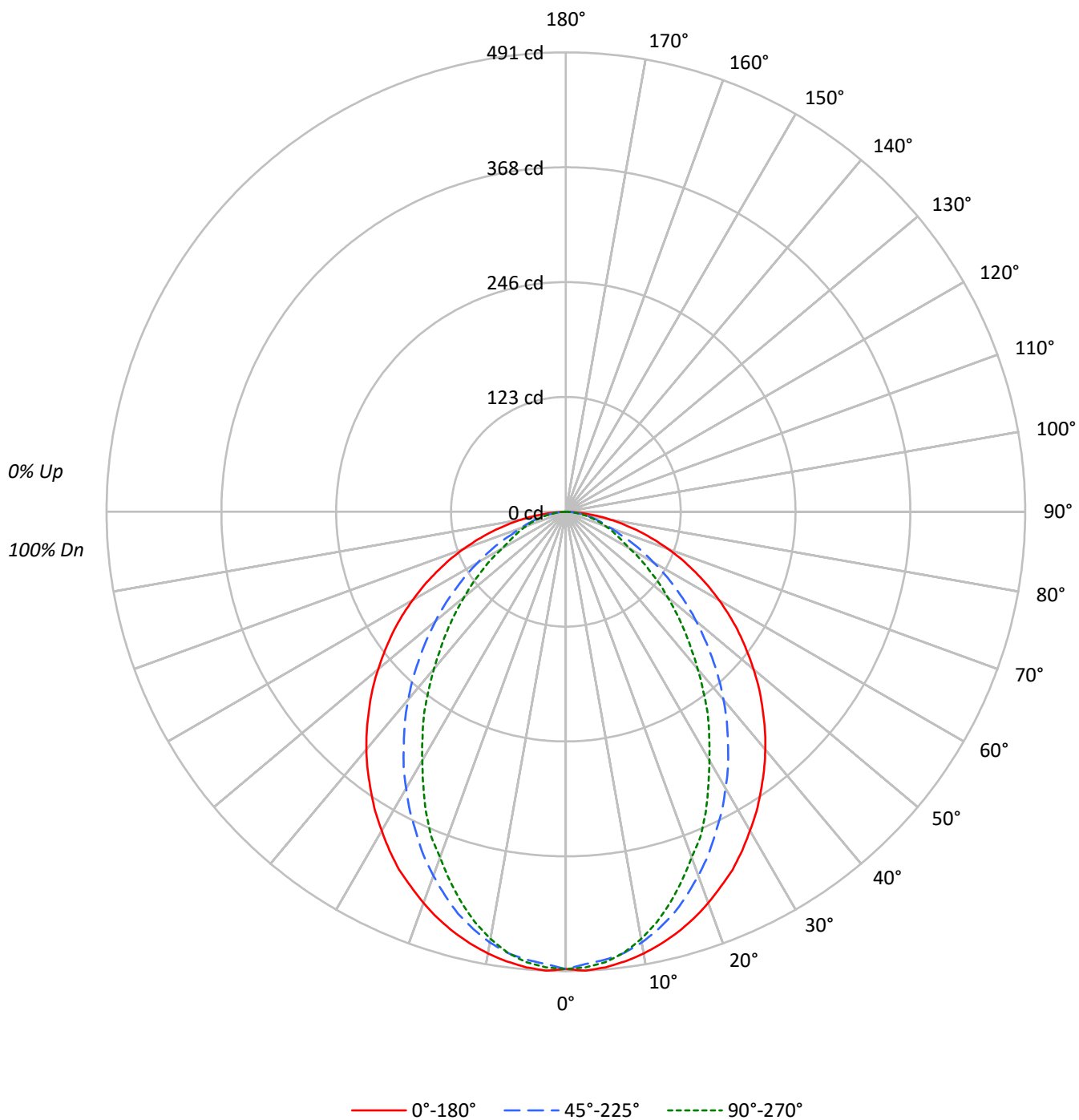
Lumens per Lamp: N/A
Luminaire Lumens: 1005.0 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	7736	7736	7736
5°	7765	7638	7681
10°	7706	7513	7450
15°	7617	7291	7081
20°	7494	6972	6622
25°	7369	6611	6179
30°	7194	6240	5610
35°	7024	5836	5111
40°	6854	5418	4532
45°	6653	4950	4009
50°	6447	4477	3497
55°	6237	3966	3003
60°	5993	3429	2492
65°	5716	2880	2270
70°	5383	2374	2087
75°	4978	2165	1945
80°	4394	1933	1778
85°	3451	1526	1526

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6653 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	4.6
10°-20°	125.7	12.5
20°-30°	176.5	17.6
30°-40°	192.4	19.1
40°-50°	176.8	17.6
50°-60°	138.9	13.8
60°-70°	90.4	9.0
70°-80°	46.5	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°	348.0	34.6
0°-40°	540.4	53.8
0°-60°	856.2	85.2
0°-90°	1005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	489	489	489	489	489	
5°	489	486	481	485	483	46
15°	465	460	445	436	432	131
25°	422	408	378	360	354	194
35°	364	341	302	274	264	228
45°	297	268	221	190	179	230
55°	226	192	144	117	109	202
65°	153	117	77	62	61	151
75°	81	50	35	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°	488.7	488.7	488.7	488.7	488.7
2.5°	490.9	488.7	483.8	488.2	487.3
5°	488.7	486.5	480.7	484.7	483.4
7.5°	484.7	482.0	475.8	477.6	475.4
10°	479.4	476.3	467.4	466.1	463.5
12.5°	472.7	468.8	456.8	454.2	449.3
15°	464.8	459.9	444.9	436.5	432.1
17.5°	455.5	448.4	429.8	420.1	413.0
20°	444.9	436.0	413.9	402.9	393.1
22.5°	433.4	423.2	397.6	382.5	375.9
25°	421.9	407.7	378.5	360.4	353.8
27.5°	408.2	393.1	360.9	340.1	329.9
30°	393.6	376.8	341.4	318.8	306.9
32.5°	379.4	359.1	322.8	296.3	285.2
35°	363.5	341.0	302.0	274.2	264.5
37.5°	348.0	323.7	282.6	252.1	241.0
40°	331.7	305.1	262.2	230.8	219.3
42.5°	314.9	286.6	241.9	209.2	198.1
45°	297.2	267.5	221.1	189.7	179.1
47.5°	280.4	249.0	201.2	169.8	160.1
50°	261.8	230.4	181.8	151.2	142.0
52.5°	243.7	210.5	163.2	134.0	125.6
55°	226.0	191.5	143.7	117.2	108.8
57.5°	207.8	172.5	126.5	101.7	94.6
60°	189.3	153.9	108.3	85.8	78.7
62.5°	171.1	135.8	92.9	71.6	68.1
65°	152.6	116.7	76.9	61.9	60.6
67.5°	134.9	99.1	61.9	54.4	53.1
70°	116.3	81.8	51.3	46.9	45.1
72.5°	98.6	65.9	42.9	39.4	38.5
75°	81.4	50.4	35.4	32.3	31.8
77.5°	64.1	35.8	27.9	26.1	25.2
80°	48.2	25.6	21.2	19.5	19.5
82.5°	33.6	17.2	14.6	13.7	13.7
85°	19.0	9.7	8.4	8.4	8.4
87.5°	7.1	3.5	3.5	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	18.34	19.86	18.71	20.18	20.49	14.30	15.82	14.67	16.14	16.45
	3H	20.11	21.47	20.49	21.80	22.16	15.57	16.93	15.95	17.26	17.62
	4H	20.77	22.06	21.17	22.40	22.78	16.07	17.35	16.47	17.70	18.08
	6H	21.26	22.45	21.68	22.81	23.20	16.45	17.63	16.86	18.00	18.39
	8H	21.43	22.56	21.85	22.94	23.35	16.58	17.70	17.00	18.09	18.49
	12H	21.53	22.61	21.96	22.99	23.42	16.66	17.74	17.09	18.12	18.55
4H	2H	18.45	19.73	18.85	20.08	20.45	15.00	16.28	15.40	16.63	17.00
	3H	20.38	21.44	20.79	21.84	22.24	16.44	17.50	16.85	17.90	18.31
	4H	21.13	22.09	21.56	22.50	22.94	17.04	18.00	17.47	18.41	18.85
	6H	21.72	22.55	22.18	23.00	23.46	17.53	18.36	17.99	18.80	19.26
	8H	21.94	22.71	22.40	23.16	23.62	17.69	18.47	18.16	18.91	19.38
	12H	22.09	22.78	22.57	23.26	23.73	17.81	18.50	18.29	18.98	19.45
8H	4H	21.15	21.93	21.62	22.38	22.84	17.40	18.17	17.86	18.62	19.08
	6H	21.79	22.43	22.29	22.92	23.40	17.98	18.63	18.48	19.12	19.59
	8H	22.04	22.62	22.55	23.13	23.61	18.20	18.78	18.72	19.29	19.78
	12H	22.24	22.75	22.75	23.25	23.81	18.38	18.89	18.89	19.39	19.95
12H	4H	21.14	21.83	21.62	22.31	22.78	17.44	18.13	17.92	18.61	19.08
	6H	21.77	22.35	22.29	22.86	23.35	18.05	18.62	18.56	19.13	19.62
	8H	22.06	22.57	22.56	23.06	23.62	18.32	18.83	18.83	19.32	19.89