

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059051

Luminaire Tested: S123RDRP-S1000D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059051
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D930-X4F0-XX-UDD-BVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

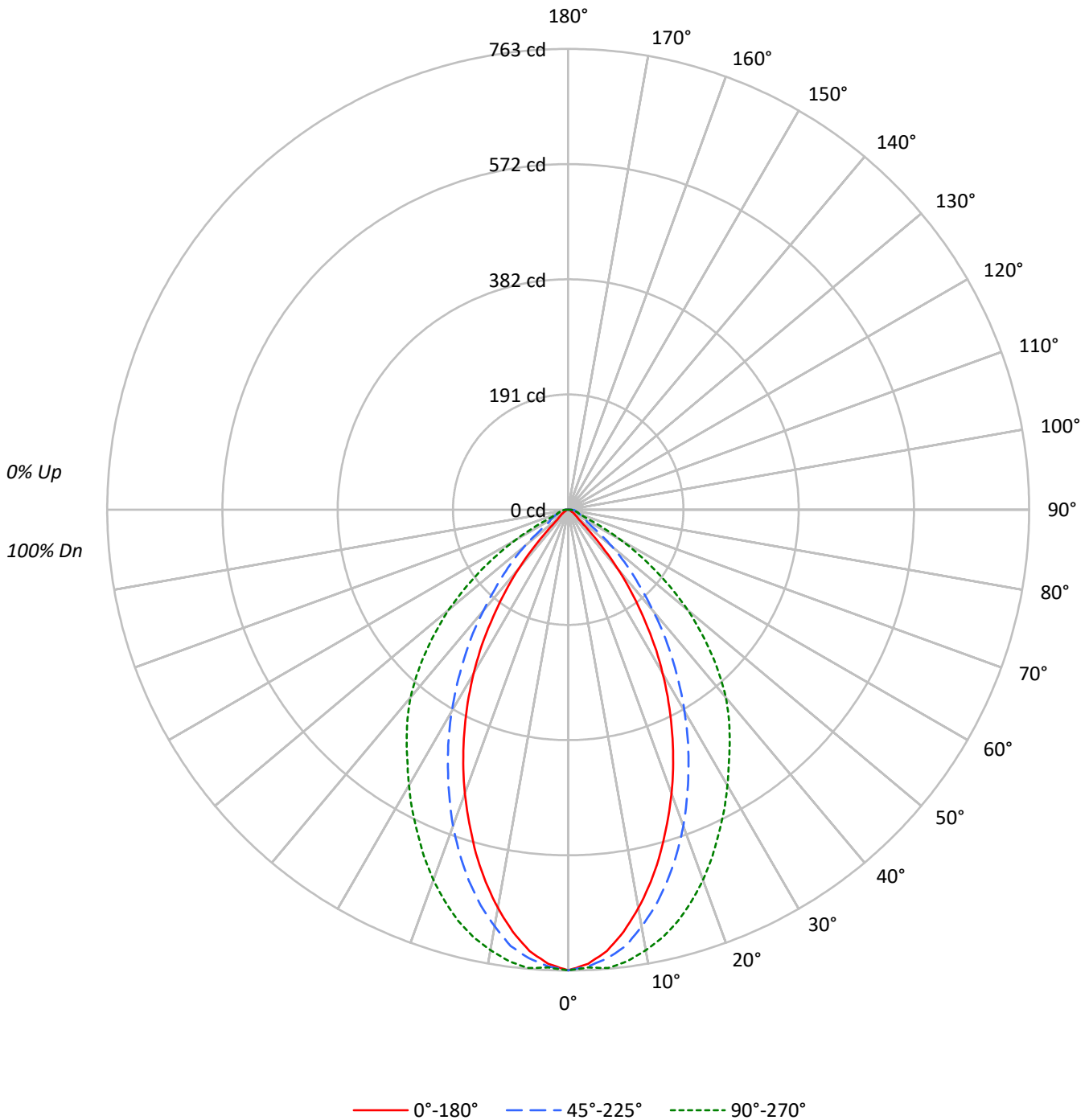
Lumens per Lamp: N/A
Luminaire Lumens: 915.6 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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	0
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8956	8956	8956
5°	8647	8789	8978
10°	7983	8352	8831
15°	7164	7724	8564
20°	6249	6963	8152
25°	5272	6102	7648
30°	4240	5218	7148
35°	3103	4296	6680
40°	1936	3349	6222
45°	732	2496	5542
50°	347	1721	4724
55°	266	944	3652
60°	188	801	2400
65°	139	697	1003
70°	137	652	652
75°	181	681	681
80°	270	811	744
85°	539	1347	1078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5542 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	7.6
10°-20°	179.5	19.6
20°-30°	222.2	24.3
30°-40°	199.2	21.8
40°-50°	130.6	14.3
50°-60°	65.4	7.1
60°-70°	25.5	2.8
70°-80°	14.3	1.6
80°-90°	8.8	1.0
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°	471.7	51.5
0°-40°	671.0	73.3
0°-60°	866.9	94.7
0°-90°	915.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	915.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	734	746	746	754	762	68
15°	589	613	635	678	704	164
25°	407	432	471	538	590	186
35°	216	246	300	390	466	135
45°	44	71	150	258	334	42
55°	13	16	46	126	178	12
65°	5	15	25	33	36	5
75°	4	15	15	15	15	4
85°	4	10	10	10	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	762.7	762.7	762.7	762.7	762.7
2.5°	752.6	763.7	756.7	757.7	758.7
5°	733.6	745.6	745.6	753.6	761.7
7.5°	704.5	718.6	728.6	742.6	753.6
10°	669.5	686.5	700.5	725.6	740.6
12.5°	631.4	652.4	670.5	703.5	724.6
15°	589.3	613.3	635.4	677.5	704.5
17.5°	544.2	568.2	597.3	646.4	679.5
20°	500.1	524.1	557.2	612.3	652.4
22.5°	454.0	479.0	514.1	575.3	622.4
25°	406.9	431.9	471.0	538.2	590.3
27.5°	359.8	384.8	428.9	502.1	559.2
30°	312.7	337.7	384.8	463.0	527.2
32.5°	265.6	292.6	341.7	426.9	495.1
35°	216.5	245.5	299.7	389.9	466.0
37.5°	171.4	198.4	259.6	357.8	437.0
40°	126.3	155.3	218.5	326.7	405.9
42.5°	82.2	113.2	181.4	292.6	370.8
45°	44.1	71.2	150.3	257.6	333.7
47.5°	24.1	39.1	121.3	220.5	295.6
50°	19.0	22.0	94.2	188.4	258.6
52.5°	16.0	18.0	67.1	158.3	217.5
55°	13.0	16.0	46.1	126.3	178.4
57.5°	11.0	14.0	36.1	98.2	139.3
60°	8.0	12.0	34.1	72.2	102.2
62.5°	6.0	13.0	30.1	50.1	67.1
65°	5.0	15.0	25.1	33.1	36.1
67.5°	4.0	16.0	22.0	21.0	21.0
70°	4.0	15.0	19.0	18.0	19.0
72.5°	4.0	16.0	17.0	16.0	17.0
75°	4.0	15.0	15.0	15.0	15.0
77.5°	4.0	14.0	14.0	13.0	13.0
80°	4.0	12.0	12.0	12.0	11.0
82.5°	4.0	11.0	11.0	11.0	9.0
85°	4.0	10.0	10.0	10.0	8.0
87.5°	3.0	9.0	10.0	9.0	6.0
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	0.00	1.21	0.32	1.53	1.84	14.22	15.48	14.59	15.79	16.10
	3H	2.29	3.40	2.67	3.73	4.10	14.30	15.41	14.68	15.74	16.11
	4H	3.39	4.43	3.80	4.78	5.16	14.38	15.41	14.78	15.76	16.15
	6H	4.38	5.33	4.80	5.70	6.10	14.48	15.43	14.90	15.80	16.20
	8H	4.87	5.76	5.30	6.16	6.56	14.54	15.44	14.97	15.83	16.23
	12H	5.42	6.28	5.86	6.67	7.10	14.62	15.48	15.05	15.86	16.29
4H	2H	3.23	4.26	3.63	4.61	5.00	14.08	15.11	14.48	15.46	15.85
	3H	5.54	6.38	5.95	6.78	7.19	14.25	15.10	14.66	15.50	15.90
	4H	6.90	7.66	7.34	8.08	8.52	14.40	15.16	14.84	15.58	16.02
	6H	7.99	8.64	8.45	9.09	9.55	14.62	15.28	15.09	15.72	16.19
	8H	8.44	9.05	8.91	9.50	9.97	14.75	15.36	15.22	15.81	16.28
	12H	8.94	9.48	9.42	9.96	10.43	14.92	15.46	15.41	15.94	16.42
8H	4H	7.88	8.49	8.35	8.93	9.40	14.40	15.01	14.87	15.45	15.93
	6H	9.39	9.89	9.90	10.39	10.87	14.73	15.23	15.24	15.73	16.21
	8H	10.17	10.62	10.69	11.13	11.63	14.96	15.41	15.49	15.93	16.42
	12H	10.97	11.37	11.49	11.87	12.44	15.30	15.70	15.81	16.19	16.76
12H	4H	8.05	8.59	8.54	9.07	9.55	14.38	14.92	14.87	15.40	15.88
	6H	9.71	10.16	10.23	10.68	11.17	14.75	15.20	15.28	15.72	16.21
	8H	10.66	11.06	11.18	11.56	12.13	15.06	15.46	15.58	15.95	16.53