

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: P1061878

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D927-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

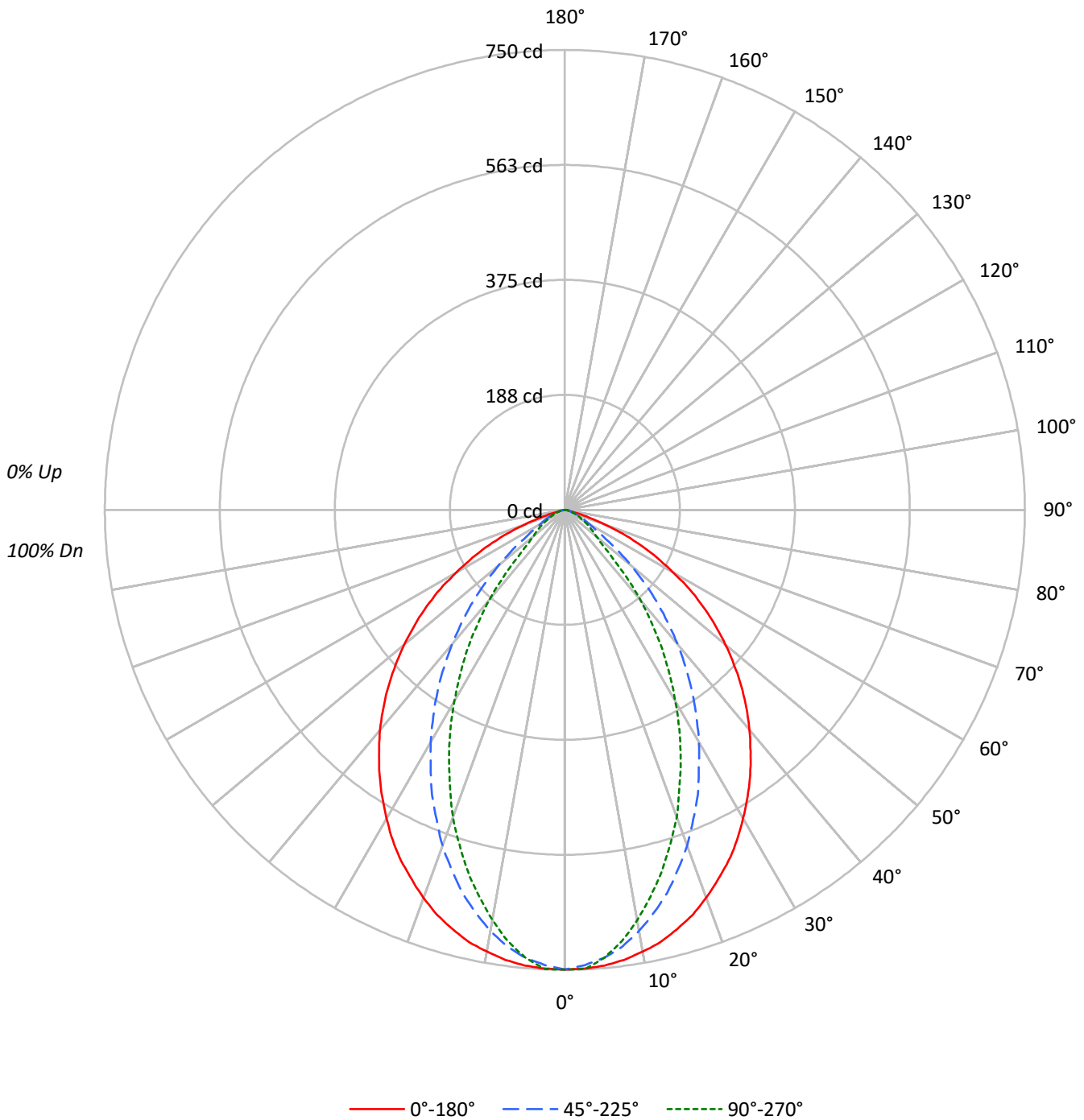
Lumens per Lamp: N/A
Luminaire Lumens: 1084.3 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
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	0
RW	70	50	30	10	70	50	30	10	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				100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5162	5162	5162
5°	5155	5070	5070
10°	5115	4875	4749
15°	5045	4604	4352
20°	4935	4272	3909
25°	4798	3893	3394
30°	4620	3476	2863
35°	4428	3043	2322
40°	4213	2569	1721
45°	3961	2059	1039
50°	3663	1510	714
55°	3305	927	594
60°	2808	629	472
65°	2219	481	373
70°	1399	344	306
75°	455	253	253
80°	151	190	226
85°	79	150	150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3961 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	6.4
10°-20°	183.1	16.9
20°-30°	240.9	22.2
30°-40°	236.7	21.8
40°-50°	179.1	16.5
50°-60°	108.6	10.0
60°-70°	51.3	4.7
70°-80°	13.4	1.2
80°-90°	2.0	0.2
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°	493.3	45.5
0°-40°	730.0	67.3
0°-60°	1017.6	93.9
0°-90°	1084.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1084.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	746	744	734	734	734	71
15°	708	689	646	621	611	199
25°	632	584	512	465	447	290
35°	527	456	362	298	276	329
45°	407	320	212	134	107	313
55°	275	189	77	52	50	245
65°	136	70	30	25	23	134
75°	17	11	10	10	10	27
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	749.7	749.7	749.7	749.7	749.7
2.5°	748.8	748.8	743.0	749.7	749.7
5°	745.9	744.0	733.5	734.5	733.5
7.5°	740.2	736.4	718.3	713.5	709.7
10°	731.6	724.0	697.3	685.9	679.2
12.5°	722.1	708.7	672.5	656.4	645.9
15°	707.8	688.7	645.9	621.1	610.6
17.5°	692.5	664.9	614.4	584.9	571.6
20°	673.5	641.1	583.0	546.8	533.5
22.5°	652.5	614.4	546.8	506.8	488.7
25°	631.6	584.0	512.5	464.9	446.8
27.5°	607.8	553.5	473.4	423.9	403.9
30°	581.1	523.0	437.2	385.8	360.1
32.5°	554.4	491.5	399.1	342.9	317.2
35°	526.8	456.3	362.0	298.2	276.3
37.5°	497.3	423.0	323.9	257.2	231.5
40°	468.7	389.6	285.8	215.3	191.5
42.5°	438.2	356.3	247.7	174.3	147.7
45°	406.8	320.1	211.5	134.3	106.7
47.5°	374.4	287.7	175.3	99.1	80.0
50°	342.0	253.4	141.0	73.4	66.7
52.5°	308.6	220.1	106.7	61.0	58.1
55°	275.3	188.6	77.2	52.4	49.5
57.5°	241.0	154.3	58.1	44.8	41.9
60°	203.9	123.8	45.7	37.2	34.3
62.5°	169.6	97.2	37.2	30.5	28.6
65°	136.2	69.5	29.5	24.8	22.9
67.5°	101.9	46.7	22.9	19.1	19.1
70°	69.5	30.5	17.1	15.2	15.2
72.5°	41.9	18.1	12.4	12.4	12.4
75°	17.1	11.4	9.5	9.5	9.5
77.5°	5.7	6.7	6.7	7.6	7.6
80°	3.8	3.8	4.8	5.7	5.7
82.5°	1.9	2.9	2.9	3.8	3.8
85°	1.0	1.0	1.9	1.9	1.9
87.5°	0.0	0.0	0.0	1.0	1.0
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	15.03	16.36	15.40	16.67	16.99	5.69	7.02	6.06	7.33	7.65
	3H	15.74	16.91	16.12	17.24	17.61	6.47	7.65	6.85	7.98	8.34
	4H	15.75	16.85	16.16	17.20	17.58	6.72	7.82	7.12	8.17	8.55
	6H	15.68	16.69	16.10	17.06	17.45	6.90	7.90	7.31	8.27	8.67
	8H	15.64	16.59	16.07	16.99	17.39	6.94	7.89	7.37	8.28	8.69
	12H	15.60	16.51	16.03	16.89	17.32	6.95	7.86	7.38	8.24	8.67
4H	2H	14.86	15.96	15.26	16.31	16.69	6.18	7.27	6.58	7.62	8.01
	3H	15.61	16.50	16.02	16.90	17.31	7.08	7.97	7.50	8.38	8.78
	4H	15.63	16.42	16.06	16.84	17.28	7.39	8.19	7.83	8.61	9.05
	6H	15.56	16.25	16.03	16.69	17.16	7.65	8.34	8.12	8.78	9.25
	8H	15.51	16.15	15.98	16.60	17.07	7.72	8.36	8.19	8.80	9.27
	12H	15.47	16.03	15.96	16.51	16.99	7.74	8.31	8.23	8.79	9.26
8H	4H	15.51	16.15	15.98	16.59	17.06	7.51	8.15	7.98	8.59	9.06
	6H	15.43	15.95	15.94	16.45	16.93	7.82	8.34	8.33	8.84	9.32
	8H	15.38	15.85	15.90	16.36	16.85	7.93	8.39	8.45	8.91	9.40
	12H	15.34	15.75	15.85	16.25	16.82	7.99	8.40	8.51	8.90	9.47
12H	4H	15.46	16.03	15.95	16.51	16.98	7.48	8.04	7.97	8.52	9.00
	6H	15.37	15.84	15.90	16.36	16.85	7.80	8.26	8.32	8.78	9.27
	8H	15.34	15.75	15.86	16.25	16.82	7.93	8.35	8.45	8.84	9.41