

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: P1062220

Luminaire Tested: S125RDR-H850D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062220
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-H850D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

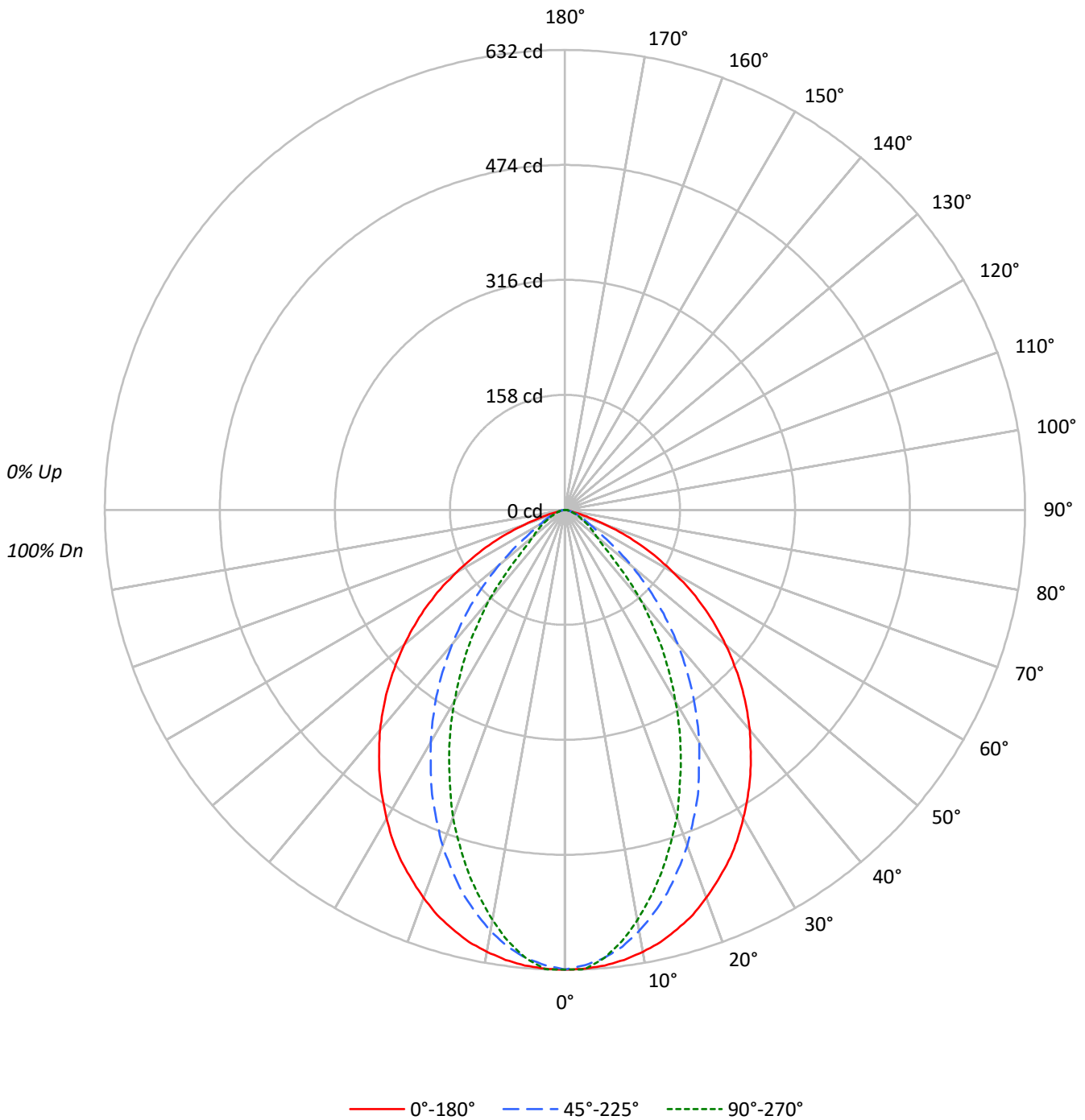
Lumens per Lamp: N/A
Luminaire Lumens: 913.8 lumens
Efficiency: N/A
Efficacy: 38.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4350	4350	4350
5°	4345	4273	4273
10°	4311	4109	4002
15°	4252	3880	3668
20°	4159	3600	3294
25°	4044	3281	2860
30°	3893	2930	2413
35°	3732	2564	1957
40°	3550	2165	1451
45°	3338	1735	875
50°	3087	1273	602
55°	2785	780	501
60°	2366	530	398
65°	1870	406	314
70°	1180	292	258
75°	386	213	213
80°	127	159	190
85°	63	126	126

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3338 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	6.4
10°-20°	154.3	16.9
20°-30°	203.0	22.2
30°-40°	199.5	21.8
40°-50°	150.9	16.5
50°-60°	91.5	10.0
60°-70°	43.2	4.7
70°-80°	11.3	1.2
80°-90°	1.7	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°	415.7	45.5
0°-40°	615.2	67.3
0°-60°	857.6	93.9
0°-90°	913.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	913.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	629	627	618	619	618	60
15°	596	580	544	523	515	168
25°	532	492	432	392	376	245
35°	444	385	305	251	233	277
45°	343	270	178	113	90	264
55°	232	159	65	44	42	207
65°	115	59	25	21	19	113
75°	14	10	8	8	8	22
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°	631.8	631.8	631.8	631.8	631.8
2.5°	631.0	631.0	626.2	631.8	631.8
5°	628.6	627.0	618.2	619.0	618.2
7.5°	623.8	620.6	605.3	601.3	598.1
10°	616.6	610.2	587.7	578.0	572.4
12.5°	608.5	597.3	566.8	553.2	544.3
15°	596.5	580.5	544.3	523.4	514.6
17.5°	583.7	560.4	517.8	492.9	481.7
20°	567.6	540.3	491.3	460.8	449.6
22.5°	549.9	517.8	460.8	427.1	411.9
25°	532.3	492.1	431.9	391.8	376.5
27.5°	512.2	466.4	399.0	357.3	340.4
30°	489.7	440.8	368.5	325.1	303.5
32.5°	467.3	414.3	336.4	289.0	267.3
35°	444.0	384.6	305.1	251.3	232.8
37.5°	419.1	356.5	273.0	216.8	195.1
40°	395.0	328.4	240.9	181.4	161.4
42.5°	369.3	300.3	208.7	146.9	124.4
45°	342.8	269.8	178.2	113.2	89.9
47.5°	315.5	242.5	147.7	83.5	67.4
50°	288.2	213.6	118.8	61.8	56.2
52.5°	260.1	185.5	89.9	51.4	49.0
55°	232.0	159.0	65.0	44.2	41.7
57.5°	203.1	130.1	49.0	37.7	35.3
60°	171.8	104.4	38.5	31.3	28.9
62.5°	142.9	81.9	31.3	25.7	24.1
65°	114.8	58.6	24.9	20.9	19.3
67.5°	85.9	39.3	19.3	16.1	16.1
70°	58.6	25.7	14.5	12.8	12.8
72.5°	35.3	15.3	10.4	10.4	10.4
75°	14.5	9.6	8.0	8.0	8.0
77.5°	4.8	5.6	5.6	6.4	6.4
80°	3.2	3.2	4.0	4.8	4.8
82.5°	1.6	2.4	2.4	3.2	3.2
85°	0.8	0.8	1.6	1.6	1.6
87.5°	0.0	0.0	0.0	0.8	0.8
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	14.44	15.77	14.80	16.08	16.40	5.09	6.42	5.45	6.73	7.05
	3H	15.14	16.32	15.52	16.65	17.02	5.87	7.05	6.25	7.38	7.74
	4H	15.16	16.26	15.56	16.61	16.99	6.12	7.21	6.52	7.56	7.95
	6H	15.09	16.10	15.51	16.47	16.86	6.29	7.30	6.71	7.67	8.06
	8H	15.05	16.00	15.48	16.39	16.80	6.34	7.29	6.77	7.68	8.09
	12H	15.01	15.92	15.44	16.30	16.73	6.35	7.26	6.78	7.64	8.07
4H	2H	14.27	15.37	14.67	15.72	16.10	5.58	6.67	5.98	7.02	7.41
	3H	15.02	15.91	15.43	16.31	16.71	6.48	7.38	6.90	7.78	8.18
	4H	15.03	15.83	15.47	16.25	16.69	6.79	7.59	7.23	8.01	8.45
	6H	14.97	15.66	15.44	16.10	16.57	7.05	7.74	7.52	8.18	8.65
	8H	14.92	15.56	15.39	16.01	16.48	7.12	7.76	7.59	8.20	8.67
	12H	14.88	15.44	15.36	15.92	16.40	7.14	7.71	7.63	8.19	8.66
8H	4H	14.92	15.55	15.39	16.00	16.47	6.91	7.54	7.38	7.99	8.46
	6H	14.84	15.36	15.34	15.86	16.34	7.22	7.74	7.73	8.24	8.72
	8H	14.79	15.25	15.31	15.77	16.26	7.33	7.79	7.85	8.31	8.80
	12H	14.75	15.16	15.26	15.65	16.22	7.39	7.80	7.90	8.30	8.87
12H	4H	14.87	15.43	15.36	15.92	16.39	6.88	7.44	7.36	7.92	8.40
	6H	14.78	15.25	15.30	15.76	16.26	7.19	7.66	7.72	8.18	8.67
	8H	14.75	15.16	15.26	15.65	16.23	7.33	7.74	7.85	8.24	8.81