

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: P1062092

Luminaire Tested: S125RDR-H610D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062092
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

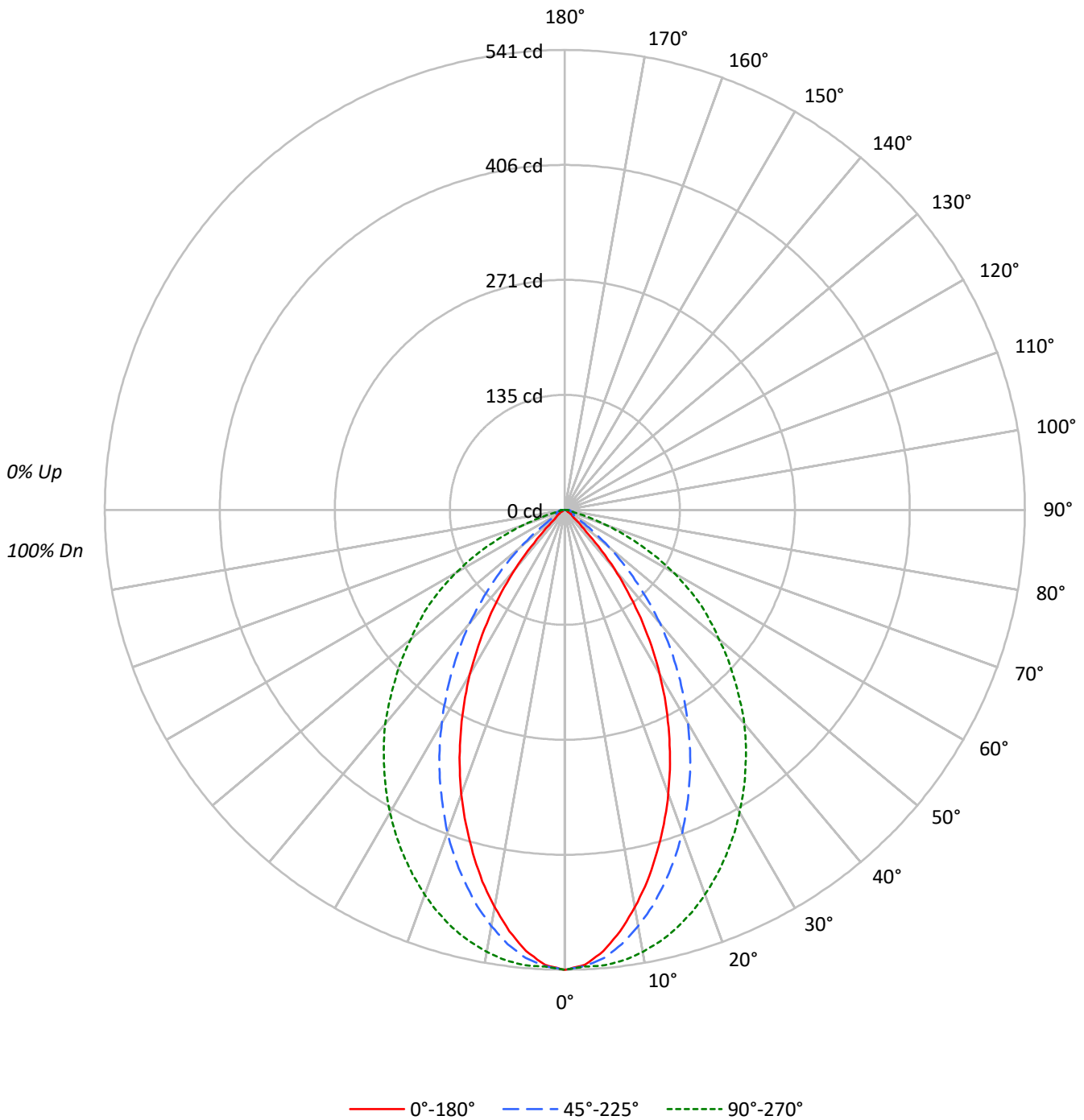
Lumens per Lamp: N/A
Luminaire Lumens: 695.9 lumens
Efficiency: N/A
Efficacy: 40.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	98	98	96	95	95	93	92	90			90	
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81			81	
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65			65	
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59			59	
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54			54	
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49			49	
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45			45	
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42	
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3726	3726	3726
5°	3602	3657	3717
10°	3317	3475	3690
15°	2978	3235	3629
20°	2607	2959	3530
25°	2202	2642	3407
30°	1775	2299	3268
35°	1305	1938	3114
40°	814	1563	2953
45°	305	1142	2745
50°	142	713	2534
55°	104	296	2343
60°	73	156	2028
65°	44	184	1606
70°	40	215	1019
75°	53	213	319
80°	79	266	238
85°	158	419	316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2745 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.6	7.1
10°-20°	128.5	18.5
20°-30°	163.6	23.5
30°-40°	152.3	21.9
40°-50°	104.3	15.0
50°-60°	57.5	8.3
60°-70°	27.2	3.9
70°-80°	8.5	1.2
80°-90°	4.4	0.6
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°	341.7	49.1
0°-40°	494.0	71.0
0°-60°	655.8	94.2
0°-90°	695.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	695.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	521	528	529	533	538	48
15°	418	431	454	488	509	116
25°	290	308	348	404	448	132
35°	155	177	231	306	370	96
45°	31	53	117	208	282	30
55°	9	10	25	116	195	8
65°	3	3	11	43	99	3
75°	2	3	8	9	12	2
85°	2	5	5	5	4	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	541.1	541.1	541.1	541.1	541.1
2.5°	535.8	541.1	537.1	537.1	537.8
5°	521.1	527.8	529.1	533.1	537.8
7.5°	499.8	508.4	515.1	526.4	534.4
10°	474.5	485.1	497.1	515.8	527.8
12.5°	447.8	459.1	477.1	503.1	519.8
15°	417.8	431.1	453.8	487.8	509.1
17.5°	387.2	401.8	429.8	469.8	496.4
20°	355.8	371.2	403.8	448.5	481.8
22.5°	323.2	339.8	375.8	426.5	465.8
25°	289.9	307.9	347.8	403.8	448.5
27.5°	256.6	275.2	319.2	380.5	430.5
30°	223.2	242.6	289.2	356.5	411.1
32.5°	189.2	210.6	259.9	332.5	391.2
35°	155.3	177.3	230.6	306.5	370.5
37.5°	121.9	144.6	201.9	281.9	349.8
40°	90.6	113.3	173.9	257.2	328.5
42.5°	58.6	82.6	144.6	231.9	305.2
45°	31.3	52.6	117.3	207.9	281.9
47.5°	16.7	28.0	91.3	183.9	259.9
50°	13.3	15.3	66.6	159.9	236.6
52.5°	10.7	12.0	42.6	135.3	215.9
55°	8.7	10.0	24.7	115.9	195.2
57.5°	6.7	8.0	14.0	96.6	171.3
60°	5.3	6.0	11.3	77.3	147.3
62.5°	3.3	4.7	11.3	60.0	123.3
65°	2.7	3.3	11.3	42.6	98.6
67.5°	2.7	2.7	11.3	28.0	74.0
70°	2.0	2.0	10.7	18.0	50.6
72.5°	2.0	2.0	9.3	12.0	29.3
75°	2.0	3.3	8.0	8.7	12.0
77.5°	2.0	5.3	7.3	7.3	6.7
80°	2.0	5.3	6.7	6.0	6.0
82.5°	2.0	5.3	5.3	5.3	4.7
85°	2.0	4.7	5.3	4.7	4.0
87.5°	2.0	4.7	4.7	4.7	2.7
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	0.00	0.00	0.00	0.00	13.61	14.90	13.98	15.21	15.53
	3H	0.00	0.00	0.00	0.00	0.00	14.40	15.54	14.78	15.87	16.23
	4H	0.00	0.00	0.00	0.00	0.00	14.43	15.49	14.83	15.84	16.22
	6H	0.00	0.00	0.00	0.00	0.00	14.38	15.36	14.80	15.73	16.12
	8H	0.00	0.00	0.00	0.00	0.00	14.36	15.28	14.79	15.67	16.08
	12H	0.00	0.00	0.00	0.00	0.42	14.34	15.22	14.78	15.60	16.03
4H	2H	0.00	0.00	0.00	0.00	0.00	13.40	14.45	13.80	14.81	15.19
	3H	0.00	0.00	0.00	0.00	0.00	14.23	15.09	14.64	15.49	15.90
	4H	0.00	0.00	0.00	0.05	0.49	14.26	15.03	14.70	15.45	15.89
	6H	0.35	1.01	0.81	1.46	1.93	14.25	14.91	14.71	15.36	15.83
	8H	1.09	1.71	1.56	2.15	2.62	14.23	14.85	14.70	15.30	15.77
	12H	1.83	2.38	2.32	2.86	3.34	14.23	14.78	14.72	15.26	15.74
8H	4H	0.90	1.52	1.37	1.97	2.44	14.15	14.77	14.62	15.21	15.68
	6H	2.64	3.14	3.14	3.64	4.12	14.15	14.65	14.65	15.15	15.63
	8H	3.59	4.04	4.11	4.56	5.05	14.15	14.61	14.68	15.12	15.62
	12H	4.53	4.93	5.04	5.42	6.00	14.20	14.60	14.72	15.10	15.67
12H	4H	1.20	1.75	1.69	2.23	2.71	14.10	14.65	14.59	15.13	15.61
	6H	3.10	3.55	3.62	4.07	4.56	14.10	14.56	14.63	15.07	15.57
	8H	4.22	4.62	4.74	5.12	5.69	14.14	14.54	14.66	15.04	15.61