

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: P1062161

Luminaire Tested: S125RDR-H610D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H610D950-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

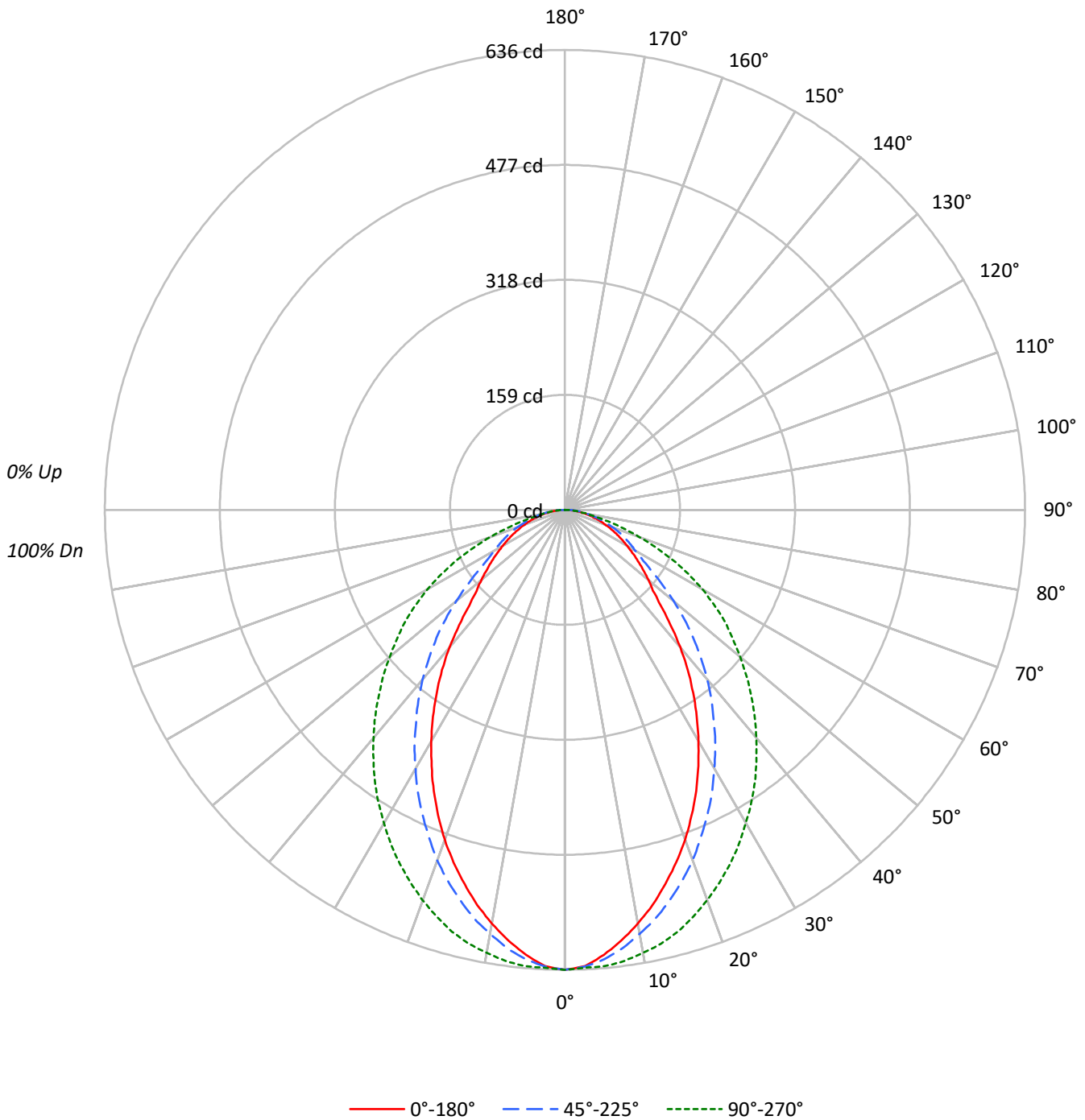
Lumens per Lamp: N/A
Luminaire Lumens: 1192.5 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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																		
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	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	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86																												
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74																												
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64																												
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56																												
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																												
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44																												
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40																												
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36																												
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33																												
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4380	4380	4380
5°	4269	4313	4379
10°	4061	4163	4349
15°	3819	3986	4303
20°	3557	3781	4209
25°	3258	3539	4103
30°	2935	3284	3976
35°	2596	3018	3851
40°	2227	2748	3701
45°	1819	2444	3545
50°	1613	2096	3383
55°	1480	1739	3242
60°	1365	1540	3018
65°	1274	1481	2691
70°	1190	1407	2200
75°	1099	1319	1623
80°	1035	1233	1186
85°	956	1209	1003

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3545 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	4.9
10°-20°	158.6	13.3
20°-30°	217.9	18.3
30°-40°	231.0	19.4
40°-50°	201.6	16.9
50°-60°	153.2	12.8
60°-70°	102.6	8.6
70°-80°	52.9	4.4
80°-90°	15.9	1.3
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°	435.4	36.5
0°-40°	666.3	55.9
0°-60°	1021.1	85.6
0°-90°	1192.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1192.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	636	636	636	636	636	
5°	618	624	624	628	634	58
15°	536	546	559	584	604	150
25°	429	442	466	505	540	197
35°	309	327	359	410	458	193
45°	187	205	251	311	364	148
55°	123	127	145	213	270	111
65°	78	80	91	121	165	78
75°	41	44	50	53	61	44
85°	12	15	15	14	13	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	636.1	636.1	636.1	636.1	636.1
2.5°	631.6	636.1	632.3	632.3	633.6
5°	617.7	624.0	624.0	628.5	633.6
7.5°	600.5	607.5	611.3	621.5	629.1
10°	580.8	588.4	595.4	610.7	622.1
12.5°	559.8	568.1	578.9	598.6	614.5
15°	535.7	545.9	559.2	584.0	603.7
17.5°	511.5	521.7	538.2	567.5	589.7
20°	485.5	496.3	516.0	547.8	574.5
22.5°	457.5	469.6	490.6	526.8	557.9
25°	428.9	442.3	465.8	504.6	540.1
27.5°	399.1	415.0	440.4	481.7	521.1
30°	369.2	385.1	413.0	458.2	500.1
32.5°	339.3	356.5	387.0	434.7	479.8
35°	308.8	326.6	359.0	409.9	458.2
37.5°	279.0	296.8	333.0	385.7	434.7
40°	247.8	266.3	305.7	360.9	411.8
42.5°	216.1	235.8	278.3	335.5	388.3
45°	186.8	205.3	251.0	310.7	364.1
47.5°	165.2	177.3	223.7	285.3	340.6
50°	150.6	157.0	195.7	260.5	315.8
52.5°	136.0	141.1	169.7	235.1	292.3
55°	123.3	127.1	144.9	212.9	270.1
57.5°	110.6	114.4	125.8	190.6	244.0
60°	99.1	102.3	111.8	167.1	219.2
62.5°	88.3	90.9	101.0	144.9	192.5
65°	78.2	80.1	90.9	121.4	165.2
67.5°	68.0	69.9	80.7	99.1	136.0
70°	59.1	59.7	69.9	80.7	109.3
72.5°	50.2	50.8	59.1	65.5	83.9
75°	41.3	43.8	49.6	52.7	61.0
77.5°	33.7	36.9	40.0	41.3	41.3
80°	26.1	29.9	31.1	31.1	29.9
82.5°	19.1	22.2	22.9	21.6	20.3
85°	12.1	15.3	15.3	14.0	12.7
87.5°	5.7	8.3	8.3	7.6	5.7
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	11.74	13.24	12.10	13.55	13.86	15.67	17.16	16.03	17.48	17.79
	3H	13.31	14.65	13.69	14.98	15.34	17.09	18.43	17.47	18.76	19.12
	4H	13.92	15.18	14.32	15.53	15.91	17.50	18.76	17.90	19.11	19.49
	6H	14.42	15.58	14.83	15.95	16.34	17.72	18.88	18.13	19.25	19.64
	8H	14.59	15.70	15.02	16.09	16.49	17.78	18.88	18.20	19.27	19.68
	12H	14.72	15.78	15.15	16.16	16.59	17.81	18.87	18.24	19.25	19.68
4H	2H	12.48	13.74	12.88	14.08	14.46	15.79	17.05	16.19	17.40	17.78
	3H	14.25	15.30	14.67	15.70	16.10	17.40	18.45	17.81	18.85	19.25
	4H	14.99	15.93	15.42	16.35	16.78	17.93	18.87	18.36	19.28	19.72
	6H	15.63	16.44	16.08	16.89	17.35	18.27	19.09	18.73	19.53	19.99
	8H	15.86	16.62	16.32	17.06	17.53	18.37	19.13	18.83	19.58	20.05
	12H	16.03	16.71	16.51	17.19	17.66	18.44	19.13	18.93	19.60	20.08
8H	4H	15.39	16.15	15.85	16.60	17.07	18.03	18.80	18.50	19.24	19.71
	6H	16.18	16.81	16.67	17.30	17.78	18.47	19.11	18.97	19.60	20.07
	8H	16.50	17.07	17.02	17.58	18.07	18.63	19.20	19.15	19.71	20.20
	12H	16.78	17.28	17.29	17.77	18.34	18.77	19.27	19.28	19.76	20.33
12H	4H	15.43	16.12	15.92	16.59	17.07	18.03	18.72	18.52	19.20	19.67
	6H	16.26	16.83	16.77	17.34	17.83	18.49	19.06	19.00	19.57	20.06
	8H	16.66	17.16	17.17	17.65	18.21	18.70	19.20	19.21	19.69	20.26