

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: P1062098

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062098
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-H610D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

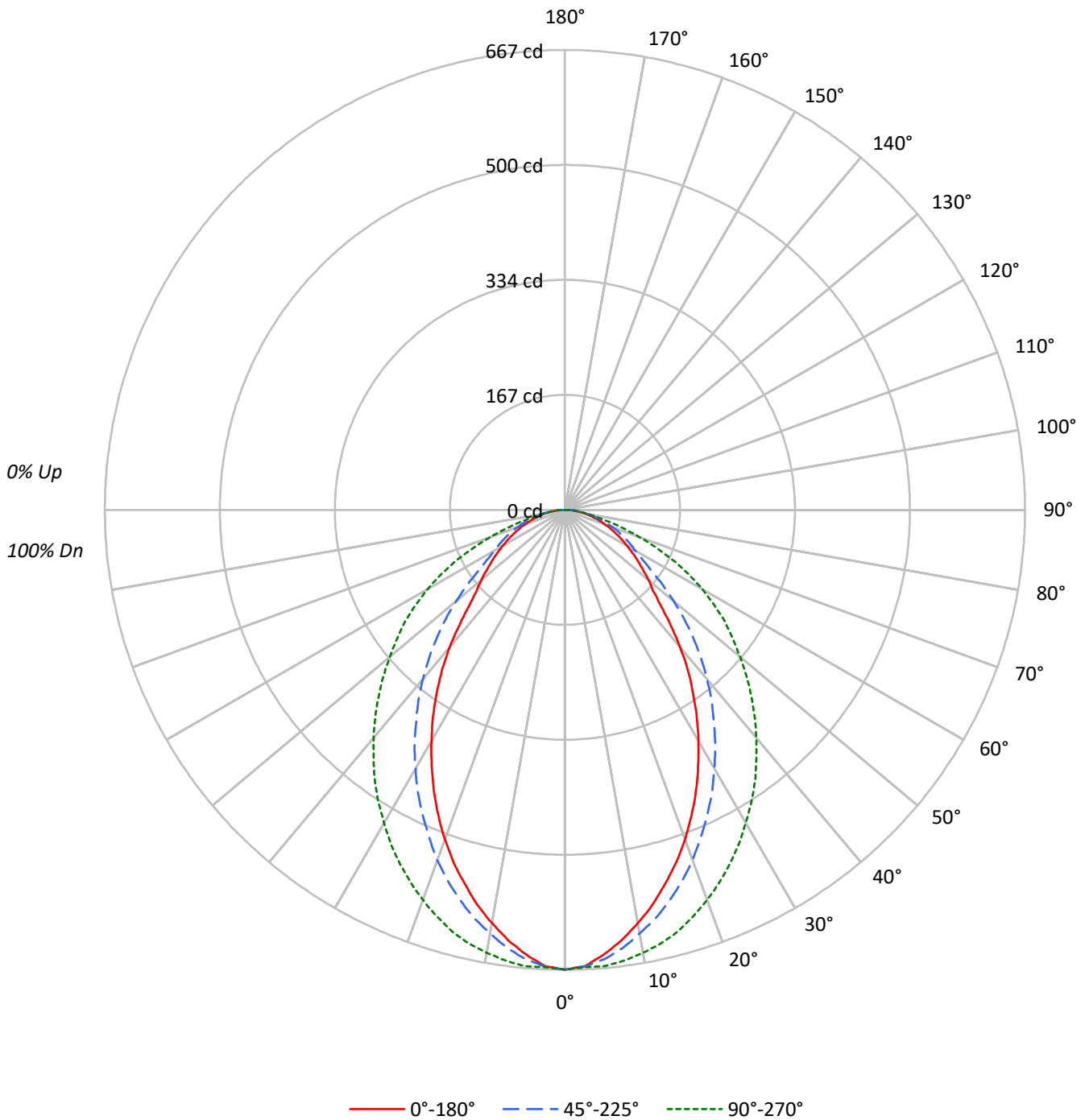
Lumens per Lamp: N/A
Luminaire Lumens: 1250.0 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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					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				
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°	4591	4591	4591
5°	4475	4521	4590
10°	4256	4363	4559
15°	4002	4179	4511
20°	3729	3963	4412
25°	3416	3709	4301
30°	3077	3443	4168
35°	2721	3163	4037
40°	2335	2880	3879
45°	1907	2562	3717
50°	1691	2198	3547
55°	1551	1823	3398
60°	1431	1614	3164
65°	1334	1553	2822
70°	1246	1476	2307
75°	1152	1383	1700
80°	1082	1293	1241
85°	1003	1264	1051

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3717 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	4.9
10°-20°	166.2	13.3
20°-30°	228.4	18.3
30°-40°	242.1	19.4
40°-50°	211.3	16.9
50°-60°	160.5	12.8
60°-70°	107.6	8.6
70°-80°	55.5	4.4
80°-90°	16.6	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°	456.3	36.5
0°-40°	698.4	55.9
0°-60°	1070.3	85.6
0°-90°	1250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	647	654	654	659	664	61
15°	562	572	586	612	633	158
25°	450	464	488	529	566	206
35°	324	342	376	430	480	202
45°	196	215	263	326	382	155
55°	129	133	152	223	283	116
65°	82	84	95	127	173	81
75°	43	46	52	55	64	46
85°	13	16	16	15	13	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	666.8	666.8	666.8	666.8	666.8
2.5°	662.1	666.8	662.8	662.8	664.1
5°	647.4	654.1	654.1	658.8	664.1
7.5°	629.5	636.8	640.8	651.4	659.4
10°	608.8	616.8	624.1	640.1	652.1
12.5°	586.8	595.5	606.8	627.5	644.1
15°	561.5	572.2	586.2	612.1	632.8
17.5°	536.2	546.9	564.2	594.8	618.1
20°	508.9	520.2	540.9	574.2	602.2
22.5°	479.6	492.2	514.2	552.2	584.8
25°	449.6	463.6	488.2	528.9	566.2
27.5°	418.3	435.0	461.6	504.9	546.2
30°	387.0	403.7	433.0	480.3	524.2
32.5°	355.7	373.7	405.7	455.6	502.9
35°	323.7	342.4	376.3	429.6	480.3
37.5°	292.4	311.1	349.0	404.3	455.6
40°	259.8	279.1	320.4	378.3	431.6
42.5°	226.5	247.1	291.8	351.7	407.0
45°	195.8	215.1	263.1	325.7	381.7
47.5°	173.2	185.8	234.5	299.1	357.0
50°	157.9	164.5	205.2	273.1	331.1
52.5°	142.5	147.9	177.8	246.5	306.4
55°	129.2	133.2	151.9	223.1	283.1
57.5°	115.9	119.9	131.9	199.8	255.8
60°	103.9	107.2	117.2	175.2	229.8
62.5°	92.6	95.3	105.9	151.9	201.8
65°	81.9	83.9	95.3	127.2	173.2
67.5°	71.3	73.3	84.6	103.9	142.5
70°	61.9	62.6	73.3	84.6	114.6
72.5°	52.6	53.3	61.9	68.6	87.9
75°	43.3	46.0	52.0	55.3	63.9
77.5°	35.3	38.6	42.0	43.3	43.3
80°	27.3	31.3	32.6	32.6	31.3
82.5°	20.0	23.3	24.0	22.6	21.3
85°	12.7	16.0	16.0	14.7	13.3
87.5°	6.0	8.7	8.7	8.0	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	11.90	13.40	12.27	13.71	14.03	15.83	17.33	16.19	17.64	17.95
	3H	13.47	14.82	13.85	15.14	15.51	17.25	18.59	17.63	18.92	19.28
	4H	14.09	15.35	14.49	15.69	16.07	17.67	18.92	18.07	19.27	19.65
	6H	14.58	15.74	14.99	16.11	16.50	17.88	19.05	18.29	19.41	19.80
	8H	14.76	15.86	15.18	16.25	16.65	17.94	19.05	18.37	19.44	19.84
	12H	14.88	15.94	15.31	16.32	16.75	17.97	19.03	18.41	19.42	19.85
4H	2H	12.64	13.90	13.04	14.25	14.63	15.96	17.21	16.36	17.56	17.94
	3H	14.42	15.46	14.83	15.86	16.26	17.56	18.61	17.98	19.01	19.41
	4H	15.15	16.10	15.59	16.51	16.95	18.09	19.03	18.52	19.45	19.89
	6H	15.79	16.61	16.25	17.05	17.51	18.43	19.25	18.89	19.70	20.16
	8H	16.02	16.78	16.48	17.23	17.69	18.53	19.30	19.00	19.74	20.21
	12H	16.19	16.88	16.67	17.35	17.83	18.61	19.29	19.09	19.77	20.24
8H	4H	15.55	16.32	16.02	16.76	17.23	18.20	18.96	18.66	19.41	19.88
	6H	16.34	16.97	16.84	17.46	17.94	18.64	19.27	19.13	19.76	20.24
	8H	16.66	17.23	17.18	17.74	18.23	18.79	19.36	19.31	19.87	20.36
	12H	16.94	17.44	17.45	17.93	18.50	18.93	19.43	19.44	19.92	20.49
12H	4H	15.60	16.28	16.08	16.76	17.23	18.20	18.88	18.68	19.36	19.83
	6H	16.42	16.99	16.94	17.50	17.99	18.65	19.22	19.17	19.73	20.22
	8H	16.82	17.32	17.33	17.81	18.38	18.86	19.36	19.37	19.86	20.42