

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: P1062137

Luminaire Tested: S125RDR-H610D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062137
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-H610D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

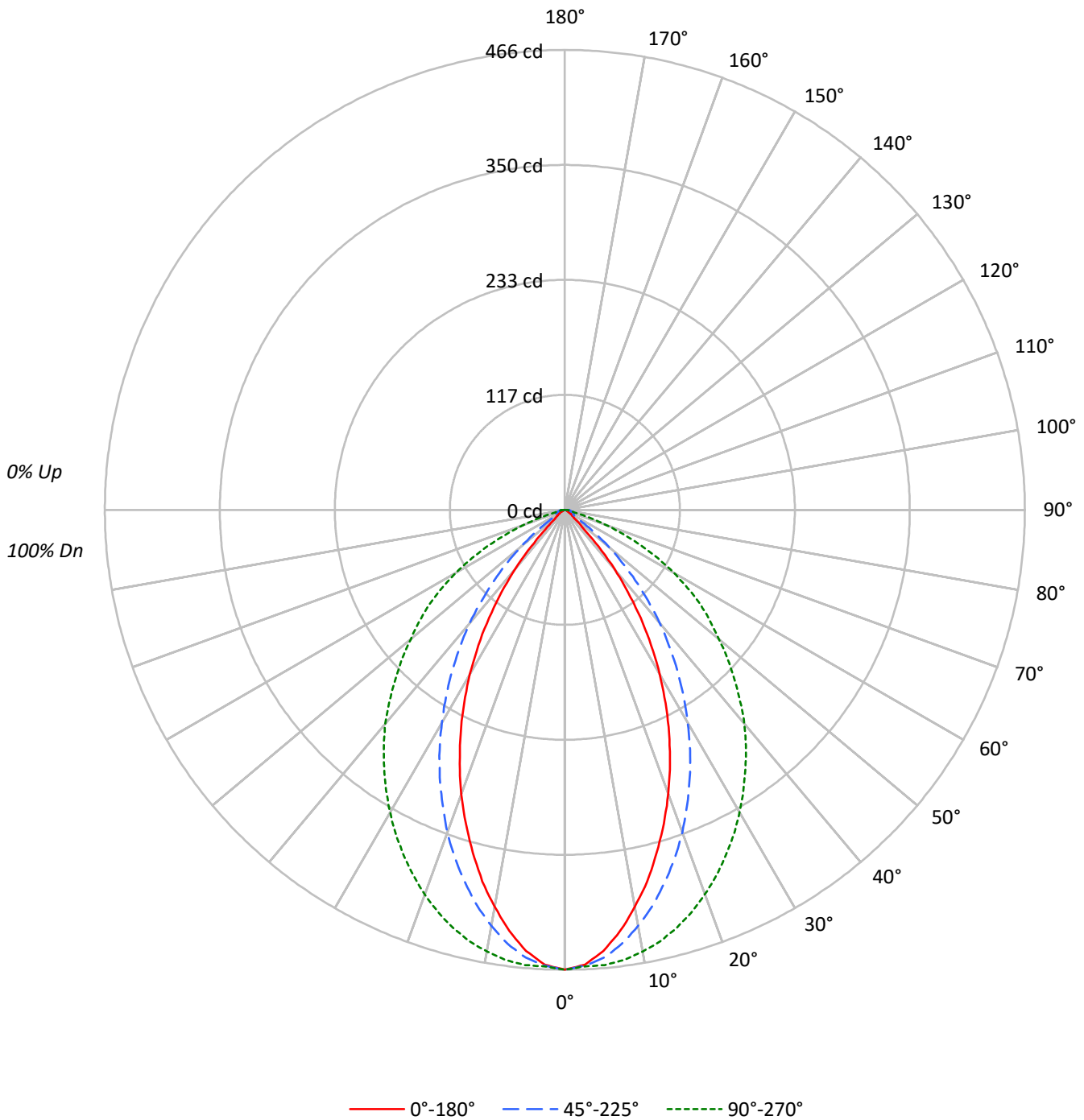
Lumens per Lamp: N/A
Luminaire Lumens: 599.2 lumens
Efficiency: N/A
Efficacy: 34.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3208	3208	3208
5°	3101	3148	3200
10°	2856	2992	3177
15°	2564	2785	3124
20°	2245	2548	3039
25°	1896	2275	2933
30°	1528	1980	2814
35°	1124	1668	2681
40°	701	1346	2543
45°	263	983	2363
50°	123	615	2182
55°	90	254	2018
60°	63	135	1746
65°	37	160	1383
70°	34	185	878
75°	45	184	274
80°	67	226	206
85°	134	363	269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2363 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	7.1
10°-20°	110.6	18.5
20°-30°	140.9	23.5
30°-40°	131.1	21.9
40°-50°	89.9	15.0
50°-60°	49.5	8.3
60°-70°	23.4	3.9
70°-80°	7.4	1.2
80°-90°	3.8	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°	294.2	49.1
0°-40°	425.3	71.0
0°-60°	564.7	94.2
0°-90°	599.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	599.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	466	466	466	466	466	
5°	449	454	456	459	463	42
15°	360	371	391	420	438	100
25°	250	265	300	348	386	114
35°	134	153	198	264	319	83
45°	27	45	101	179	243	26
55°	8	9	21	100	168	7
65°	2	3	10	37	85	3
75°	2	3	7	8	10	2
85°	2	4	5	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	465.9	465.9	465.9	465.9	465.9
2.5°	461.3	465.9	462.4	462.4	463.0
5°	448.7	454.4	455.5	459.0	463.0
7.5°	430.3	437.8	443.5	453.3	460.1
10°	408.5	417.7	428.0	444.1	454.4
12.5°	385.6	395.3	410.8	433.2	447.5
15°	359.7	371.2	390.7	420.0	438.3
17.5°	333.3	346.0	370.1	404.5	427.4
20°	306.4	319.6	347.7	386.1	414.8
22.5°	278.3	292.6	323.6	367.2	401.0
25°	249.6	265.1	299.5	347.7	386.1
27.5°	220.9	237.0	274.8	327.6	370.6
30°	192.2	208.8	249.0	306.9	354.0
32.5°	162.9	181.3	223.8	286.3	336.8
35°	133.7	152.6	198.5	263.9	319.0
37.5°	105.0	124.5	173.8	242.7	301.2
40°	78.0	97.5	149.7	221.5	282.9
42.5°	50.5	71.1	124.5	199.7	262.8
45°	27.0	45.3	101.0	179.0	242.7
47.5°	14.3	24.1	78.6	158.4	223.8
50°	11.5	13.2	57.4	137.7	203.7
52.5°	9.2	10.3	36.7	116.5	185.9
55°	7.5	8.6	21.2	99.8	168.1
57.5°	5.7	6.9	12.0	83.2	147.5
60°	4.6	5.2	9.8	66.6	126.8
62.5°	2.9	4.0	9.8	51.6	106.1
65°	2.3	2.9	9.8	36.7	84.9
67.5°	2.3	2.3	9.8	24.1	63.7
70°	1.7	1.7	9.2	15.5	43.6
72.5°	1.7	1.7	8.0	10.3	25.2
75°	1.7	2.9	6.9	7.5	10.3
77.5°	1.7	4.6	6.3	6.3	5.7
80°	1.7	4.6	5.7	5.2	5.2
82.5°	1.7	4.6	4.6	4.6	4.0
85°	1.7	4.0	4.6	4.0	3.4
87.5°	1.7	4.0	4.0	4.0	2.3
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	13.10	14.38	13.46	14.69	15.01
	3H	0.00	0.00	0.00	0.00	0.00	13.88	15.02	14.26	15.35	15.72
	4H	0.00	0.00	0.00	0.00	0.00	13.91	14.97	14.31	15.32	15.70
	6H	0.00	0.00	0.00	0.00	0.00	13.86	14.84	14.28	15.21	15.60
	8H	0.00	0.00	0.00	0.00	0.00	13.84	14.76	14.27	15.15	15.56
	12H	0.00	0.00	0.00	0.00	0.00	13.82	14.70	14.26	15.08	15.51
4H	2H	0.00	0.00	0.00	0.00	0.00	12.88	13.94	13.28	14.29	14.67
	3H	0.00	0.00	0.00	0.00	0.00	13.71	14.57	14.12	14.97	15.38
	4H	0.00	0.00	0.00	0.00	0.00	13.74	14.51	14.18	14.93	15.38
	6H	0.00	0.51	0.31	0.96	1.43	13.73	14.39	14.19	14.84	15.31
	8H	0.58	1.20	1.05	1.65	2.12	13.71	14.33	14.18	14.78	15.25
	12H	1.31	1.86	1.80	2.34	2.82	13.71	14.26	14.20	14.74	15.22
8H	4H	0.39	1.01	0.86	1.46	1.93	13.63	14.25	14.10	14.69	15.17
	6H	2.13	2.64	2.64	3.14	3.62	13.63	14.13	14.13	14.63	15.11
	8H	3.08	3.54	3.61	4.05	4.55	13.64	14.09	14.16	14.61	15.10
	12H	4.01	4.41	4.53	4.91	5.48	13.68	14.08	14.20	14.58	15.15
12H	4H	0.69	1.24	1.18	1.72	2.20	13.59	14.13	14.07	14.62	15.09
	6H	2.59	3.04	3.11	3.56	4.05	13.58	14.04	14.11	14.55	15.05
	8H	3.72	4.12	4.24	4.62	5.19	13.62	14.02	14.14	14.52	15.09