

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: P1062011

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062011
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-H375D835-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

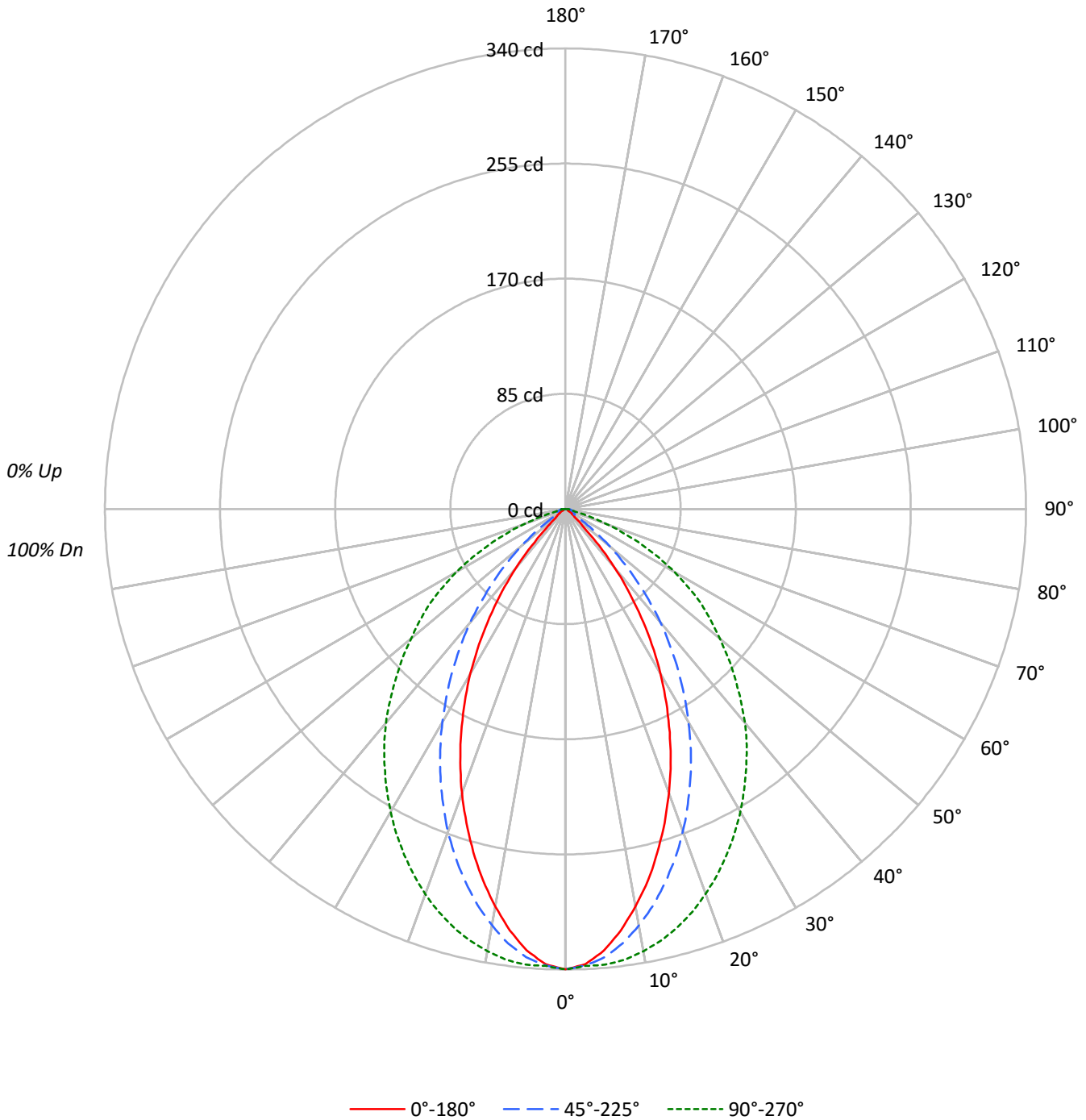
Lumens per Lamp: N/A
Luminaire Lumens: 437.0 lumens
Efficiency: N/A
Efficacy: 37.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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									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	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°	2340	2340	2340
5°	2261	2296	2334
10°	2083	2183	2317
15°	1870	2032	2279
20°	1637	1858	2216
25°	1383	1659	2139
30°	1115	1444	2053
35°	820	1217	1956
40°	511	981	1854
45°	192	717	1723
50°	90	448	1591
55°	65	186	1472
60°	45	98	1274
65°	28	116	1008
70°	26	135	640
75°	35	133	200
80°	52	167	151
85°	103	261	197

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1723 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	7.1
10°-20°	80.7	18.5
20°-30°	102.8	23.5
30°-40°	95.6	21.9
40°-50°	65.5	15.0
50°-60°	36.1	8.3
60°-70°	17.1	3.9
70°-80°	5.4	1.2
80°-90°	2.7	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°	214.6	49.1
0°-40°	310.2	71.0
0°-60°	411.8	94.2
0°-90°	437.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	437.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	340	340	340	340	340	
5°	327	331	332	335	338	30
15°	262	271	285	306	320	73
25°	182	193	218	254	282	83
35°	98	111	145	192	233	60
45°	20	33	74	131	177	19
55°	5	6	16	73	123	5
65°	2	2	7	27	62	2
75°	1	2	5	5	8	1
85°	1	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	339.8	339.8	339.8	339.8	339.8
2.5°	336.4	339.8	337.3	337.3	337.7
5°	327.2	331.4	332.2	334.8	337.7
7.5°	313.8	319.3	323.5	330.6	335.6
10°	297.9	304.6	312.2	323.9	331.4
12.5°	281.2	288.3	299.6	315.9	326.4
15°	262.4	270.7	285.0	306.3	319.7
17.5°	243.1	252.3	269.9	295.0	311.7
20°	223.4	233.1	253.6	281.6	302.5
22.5°	202.9	213.4	236.0	267.8	292.5
25°	182.0	193.3	218.4	253.6	281.6
27.5°	161.1	172.8	200.4	238.9	270.3
30°	140.2	152.3	181.6	223.9	258.2
32.5°	118.8	132.2	163.2	208.8	245.6
35°	97.5	111.3	144.8	192.5	232.7
37.5°	76.6	90.8	126.8	177.0	219.7
40°	56.9	71.1	109.2	161.5	206.3
42.5°	36.8	51.9	90.8	145.6	191.6
45°	19.7	33.1	73.6	130.6	177.0
47.5°	10.5	17.6	57.3	115.5	163.2
50°	8.4	9.6	41.8	100.4	148.5
52.5°	6.7	7.5	26.8	84.9	135.6
55°	5.4	6.3	15.5	72.8	122.6
57.5°	4.2	5.0	8.8	60.7	107.5
60°	3.3	3.8	7.1	48.5	92.5
62.5°	2.1	2.9	7.1	37.7	77.4
65°	1.7	2.1	7.1	26.8	61.9
67.5°	1.7	1.7	7.1	17.6	46.4
70°	1.3	1.3	6.7	11.3	31.8
72.5°	1.3	1.3	5.9	7.5	18.4
75°	1.3	2.1	5.0	5.4	7.5
77.5°	1.3	3.3	4.6	4.6	4.2
80°	1.3	3.3	4.2	3.8	3.8
82.5°	1.3	3.3	3.3	3.3	2.9
85°	1.3	2.9	3.3	2.9	2.5
87.5°	1.3	2.9	2.9	2.9	1.7
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	12.00	13.28	12.36	13.60	13.91
	3H	0.00	0.00	0.00	0.00	0.00	12.79	13.92	13.17	14.25	14.62
	4H	0.00	0.00	0.00	0.00	0.00	12.81	13.87	13.21	14.22	14.60
	6H	0.00	0.00	0.00	0.00	0.00	12.77	13.74	13.18	14.11	14.50
	8H	0.00	0.00	0.00	0.00	0.00	12.74	13.66	13.18	14.05	14.46
	12H	0.00	0.00	0.00	0.00	0.00	12.73	13.60	13.16	13.99	14.42
4H	2H	0.00	0.00	0.00	0.00	0.00	11.78	12.84	12.19	13.19	13.58
	3H	0.00	0.00	0.00	0.00	0.00	12.61	13.47	13.02	13.88	14.28
	4H	0.00	0.00	0.00	0.00	0.00	12.64	13.41	13.08	13.83	14.28
	6H	0.00	0.00	0.00	0.00	0.33	12.63	13.30	13.10	13.74	14.21
	8H	0.00	0.12	0.00	0.57	1.04	12.61	13.23	13.08	13.68	14.15
	12H	0.26	0.80	0.75	1.29	1.76	12.62	13.16	13.10	13.65	14.12
8H	4H	0.00	0.00	0.00	0.36	0.84	12.53	13.15	13.00	13.60	14.07
	6H	1.02	1.53	1.53	2.03	2.51	12.53	13.04	13.03	13.53	14.02
	8H	1.97	2.42	2.49	2.94	3.43	12.54	12.99	13.06	13.51	14.00
	12H	2.91	3.31	3.42	3.80	4.38	12.58	12.98	13.10	13.48	14.05
12H	4H	0.00	0.15	0.09	0.63	1.10	12.49	13.03	12.97	13.52	13.99
	6H	1.48	1.93	2.00	2.45	2.94	12.49	12.94	13.01	13.46	13.95
	8H	2.60	3.00	3.11	3.49	4.07	12.52	12.92	13.04	13.42	13.99