

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: P1062035

Luminaire Tested: S125RDR-H375D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062035
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-H375D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

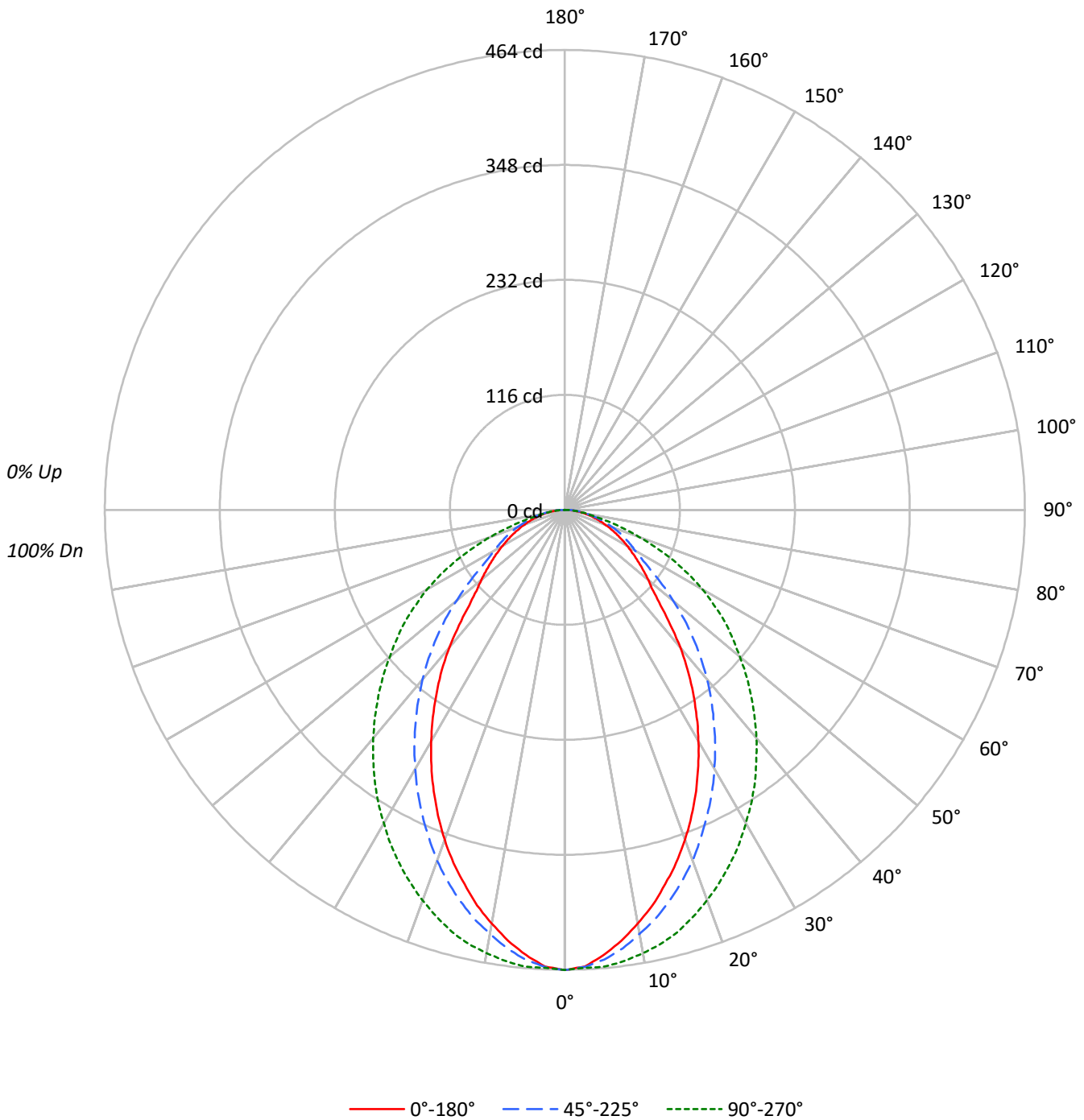
Lumens per Lamp: N/A
Luminaire Lumens: 870.4 lumens
Efficiency: N/A
Efficacy: 74.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	
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°	3197	3197	3197
5°	3116	3148	3197
10°	2964	3038	3175
15°	2787	2910	3141
20°	2597	2760	3072
25°	2379	2583	2996
30°	2143	2397	2903
35°	1895	2203	2811
40°	1626	2005	2702
45°	1328	1784	2588
50°	1177	1531	2469
55°	1080	1270	2366
60°	997	1124	2203
65°	930	1080	1965
70°	868	1027	1606
75°	803	963	1184
80°	753	900	864
85°	695	877	735

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2588 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	4.9
10°-20°	115.7	13.3
20°-30°	159.1	18.3
30°-40°	168.6	19.4
40°-50°	147.2	16.9
50°-60°	111.8	12.8
60°-70°	74.9	8.6
70°-80°	38.6	4.4
80°-90°	11.6	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°	317.8	36.5
0°-40°	486.4	55.9
0°-60°	745.3	85.6
0°-90°	870.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	870.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	451	456	456	459	462	42
15°	391	398	408	426	441	110
25°	313	323	340	368	394	144
35°	225	238	262	299	334	141
45°	136	150	183	227	266	108
55°	90	93	106	155	197	81
65°	57	58	66	89	121	57
75°	30	32	36	38	44	32
85°	9	11	11	10	9	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	464.3	464.3	464.3	464.3	464.3
2.5°	461.1	464.3	461.5	461.5	462.5
5°	450.9	455.5	455.5	458.8	462.5
7.5°	438.4	443.5	446.2	453.7	459.2
10°	424.0	429.5	434.6	445.8	454.1
12.5°	408.7	414.7	422.6	437.0	448.6
15°	391.0	398.5	408.2	426.3	440.7
17.5°	373.4	380.8	392.9	414.2	430.5
20°	354.4	362.3	376.7	399.9	419.3
22.5°	334.0	342.8	358.1	384.5	407.3
25°	313.1	322.8	340.0	368.3	394.3
27.5°	291.3	302.9	321.5	351.6	380.4
30°	269.5	281.1	301.5	334.4	365.1
32.5°	247.7	260.2	282.5	317.3	350.2
35°	225.4	238.4	262.1	299.2	334.4
37.5°	203.6	216.6	243.1	281.6	317.3
40°	180.9	194.4	223.1	263.5	300.6
42.5°	157.7	172.1	203.2	244.9	283.4
45°	136.4	149.8	183.2	226.8	265.8
47.5°	120.6	129.4	163.3	208.3	248.6
50°	109.9	114.6	142.9	190.2	230.5
52.5°	99.3	103.0	123.9	171.6	213.4
55°	90.0	92.8	105.8	155.4	197.1
57.5°	80.7	83.5	91.8	139.2	178.1
60°	72.4	74.7	81.6	122.0	160.0
62.5°	64.5	66.3	73.8	105.8	140.6
65°	57.1	58.4	66.3	88.6	120.6
67.5°	49.6	51.0	58.9	72.4	99.3
70°	43.1	43.6	51.0	58.9	79.8
72.5°	36.6	37.1	43.1	47.8	61.2
75°	30.2	32.0	36.2	38.5	44.5
77.5°	24.6	26.9	29.2	30.2	30.2
80°	19.0	21.8	22.7	22.7	21.8
82.5°	13.9	16.2	16.7	15.8	14.8
85°	8.8	11.1	11.1	10.2	9.3
87.5°	4.2	6.0	6.0	5.6	4.2
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	10.65	12.14	11.01	12.46	12.77	14.57	16.07	14.94	16.38	16.70
	3H	12.22	13.56	12.59	13.89	14.25	16.00	17.34	16.37	17.67	18.03
	4H	12.83	14.09	13.23	14.44	14.82	16.41	17.67	16.81	18.02	18.40
	6H	13.32	14.49	13.74	14.85	15.25	16.63	17.79	17.04	18.16	18.55
	8H	13.50	14.60	13.92	14.99	15.40	16.69	17.79	17.11	18.18	18.58
	12H	13.62	14.68	14.05	15.06	15.49	16.72	17.78	17.15	18.16	18.59
4H	2H	11.38	12.64	11.78	12.99	13.37	14.70	15.96	15.10	16.31	16.69
	3H	13.16	14.20	13.57	14.60	15.01	16.31	17.35	16.72	17.75	18.16
	4H	13.90	14.84	14.33	15.25	15.69	16.84	17.78	17.27	18.19	18.63
	6H	14.53	15.35	14.99	15.79	16.25	17.18	18.00	17.64	18.44	18.90
	8H	14.76	15.52	15.22	15.97	16.44	17.28	18.04	17.74	18.49	18.95
	12H	14.93	15.61	15.41	16.09	16.56	17.35	18.03	17.83	18.51	18.98
8H	4H	14.30	15.06	14.76	15.50	15.97	16.94	17.71	17.41	18.15	18.62
	6H	15.08	15.71	15.58	16.21	16.68	17.38	18.01	17.88	18.50	18.98
	8H	15.41	15.97	15.92	16.48	16.97	17.54	18.11	18.05	18.62	19.11
	12H	15.68	16.18	16.19	16.67	17.24	17.68	18.18	18.19	18.67	19.23
12H	4H	14.34	15.02	14.82	15.50	15.97	16.94	17.63	17.43	18.10	18.58
	6H	15.16	15.73	15.68	16.24	16.73	17.40	17.97	17.91	18.48	18.96
	8H	15.56	16.06	16.07	16.55	17.12	17.61	18.11	18.12	18.60	19.16