

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: P1062002

Luminaire Tested: S125RDR-H375D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062002  
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-H375D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

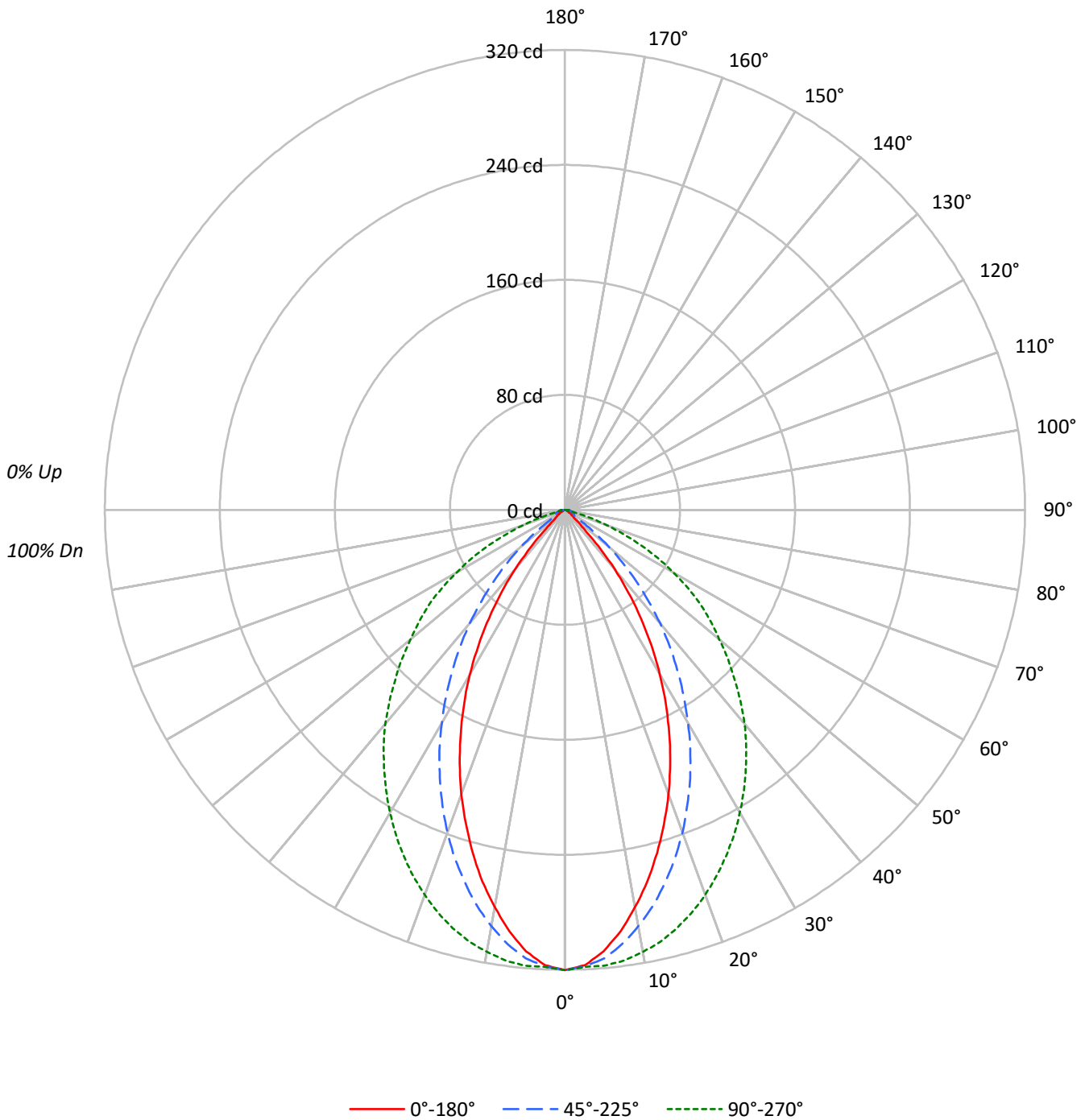
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 411.9 lumens  
Efficiency: N/A  
Efficacy: 35.2 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	
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°	2205	2205	2205
5°	2132	2165	2200
10°	1963	2057	2184
15°	1763	1915	2148
20°	1543	1751	2089
25°	1304	1564	2016
30°	1050	1361	1934
35°	772	1147	1843
40°	482	925	1747
45°	180	676	1624
50°	85	422	1500
55°	61	175	1388
60°	44	92	1201
65°	26	109	951
70°	24	127	604
75°	32	125	189
80°	48	155	139
85°	95	253	190

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1624 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.4	7.1
10°-20°	76.0	18.5
20°-30°	96.8	23.5
30°-40°	90.1	21.9
40°-50°	61.8	15.0
50°-60°	34.0	8.3
60°-70°	16.1	3.9
70°-80°	5.1	1.2
80°-90°	2.6	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°	202.2	49.1
0°-40°	292.4	71.0
0°-60°	388.2	94.2
0°-90°	411.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	411.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	320	320	320	320	320	
5°	308	312	313	316	318	29
15°	247	255	269	289	301	69
25°	172	182	206	239	265	78
35°	92	105	136	181	219	57
45°	18	31	69	123	167	18
55°	5	6	15	69	116	5
65°	2	2	7	25	58	2
75°	1	2	5	5	7	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°	320.3	320.3	320.3	320.3	320.3
2.5°	317.1	320.3	317.9	317.9	318.3
5°	308.4	312.4	313.2	315.5	318.3
7.5°	295.8	300.9	304.9	311.6	316.3
10°	280.8	287.1	294.2	305.3	312.4
12.5°	265.0	271.7	282.4	297.8	307.6
15°	247.3	255.2	268.6	288.7	301.3
17.5°	229.1	237.8	254.4	278.0	293.8
20°	210.6	219.7	239.0	265.4	285.1
22.5°	191.3	201.1	222.4	252.4	275.7
25°	171.6	182.2	205.9	239.0	265.4
27.5°	151.8	162.9	188.9	225.2	254.8
30°	132.1	143.6	171.2	211.0	243.3
32.5°	112.0	124.6	153.8	196.8	231.5
35°	91.9	104.9	136.5	181.4	219.3
37.5°	72.2	85.6	119.5	166.8	207.1
40°	53.6	67.0	102.9	152.2	194.4
42.5°	34.7	48.9	85.6	137.3	180.6
45°	18.5	31.2	69.4	123.1	166.8
47.5°	9.9	16.6	54.0	108.9	153.8
50°	7.9	9.1	39.4	94.7	140.0
52.5°	6.3	7.1	25.2	80.1	127.8
55°	5.1	5.9	14.6	68.6	115.6
57.5°	3.9	4.7	8.3	57.2	101.4
60°	3.2	3.5	6.7	45.8	87.2
62.5°	2.0	2.8	6.7	35.5	73.0
65°	1.6	2.0	6.7	25.2	58.4
67.5°	1.6	1.6	6.7	16.6	43.8
70°	1.2	1.2	6.3	10.6	30.0
72.5°	1.2	1.2	5.5	7.1	17.4
75°	1.2	2.0	4.7	5.1	7.1
77.5°	1.2	3.2	4.3	4.3	3.9
80°	1.2	3.2	3.9	3.5	3.5
82.5°	1.2	3.2	3.2	3.2	2.8
85°	1.2	2.8	3.2	2.8	2.4
87.5°	1.2	2.8	2.8	2.8	1.6
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	11.79	13.08	12.16	13.39	13.71
	3H	0.00	0.00	0.00	0.00	0.00	12.58	13.72	12.96	14.05	14.41
	4H	0.00	0.00	0.00	0.00	0.00	12.61	13.67	13.01	14.02	14.40
	6H	0.00	0.00	0.00	0.00	0.00	12.56	13.53	12.98	13.90	14.30
	8H	0.00	0.00	0.00	0.00	0.00	12.54	13.46	12.97	13.85	14.26
	12H	0.00	0.00	0.00	0.00	0.00	12.52	13.40	12.95	13.78	14.21
4H	2H	0.00	0.00	0.00	0.00	0.00	11.58	12.64	11.98	12.99	13.37
	3H	0.00	0.00	0.00	0.00	0.00	12.40	13.27	12.82	13.67	14.08
	4H	0.00	0.00	0.00	0.00	0.00	12.44	13.21	12.87	13.63	14.07
	6H	0.00	0.00	0.00	0.00	0.16	12.43	13.09	12.89	13.54	14.00
	8H	0.00	0.00	0.00	0.40	0.87	12.41	13.03	12.88	13.48	13.95
	12H	0.08	0.63	0.57	1.11	1.59	12.41	12.96	12.90	13.44	13.92
8H	4H	0.00	0.00	0.00	0.14	0.61	12.32	12.94	12.79	13.39	13.86
	6H	0.85	1.35	1.35	1.85	2.33	12.32	12.83	12.83	13.33	13.81
	8H	1.82	2.27	2.34	2.79	3.28	12.33	12.79	12.85	13.30	13.79
	12H	2.77	3.17	3.28	3.67	4.24	12.38	12.78	12.90	13.28	13.85
12H	4H	0.00	0.00	0.00	0.40	0.87	12.28	12.83	12.77	13.31	13.79
	6H	1.30	1.76	1.83	2.28	2.77	12.28	12.73	12.80	13.25	13.74
	8H	2.46	2.86	2.98	3.36	3.93	12.32	12.72	12.84	13.22	13.79