

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: P1062074

Luminaire Tested: S125RDR-H375D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062074  
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-H375D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

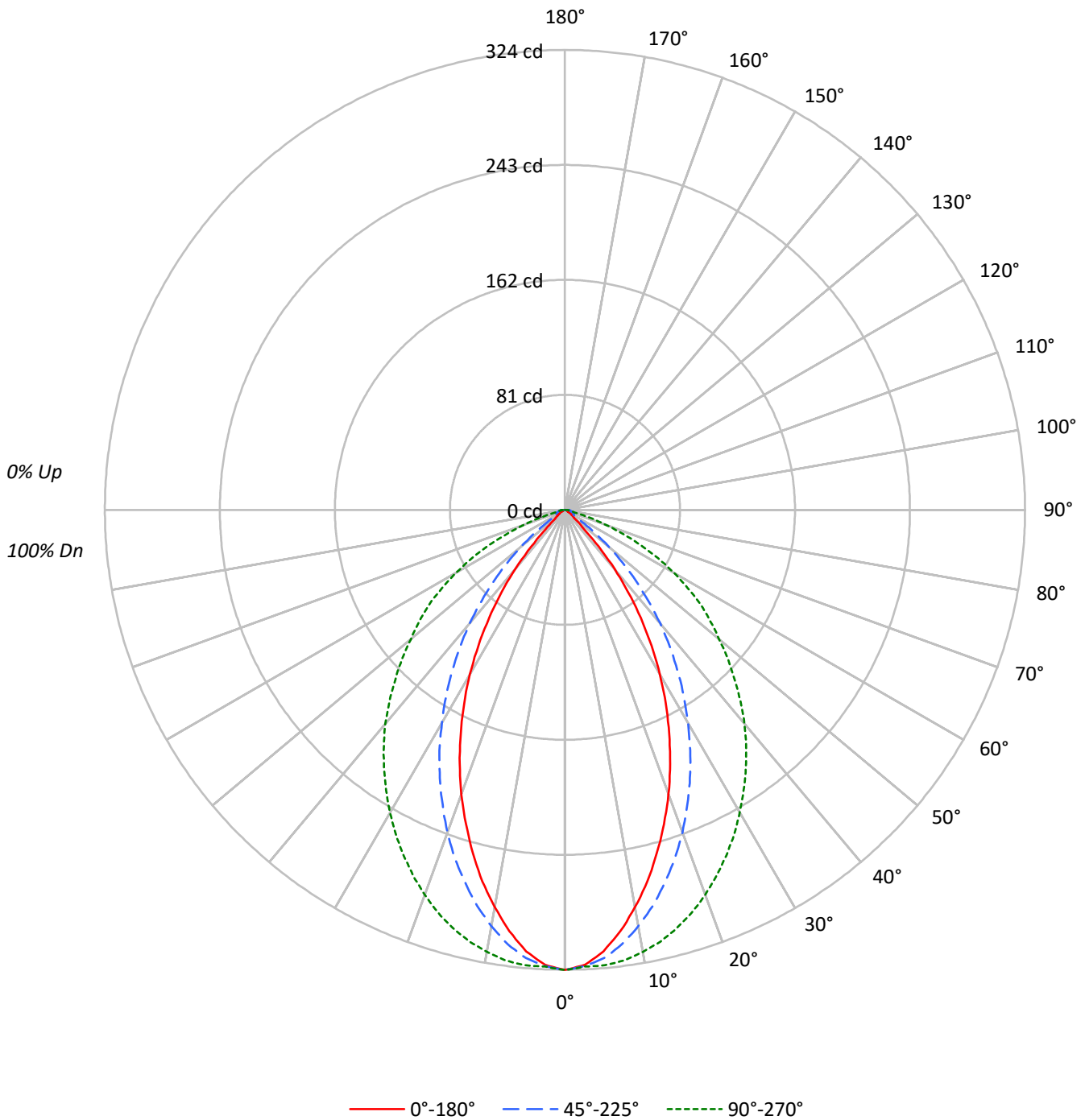
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 416.9 lumens  
Efficiency: N/A  
Efficacy: 35.6 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				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2232	2232	2232
5°	2158	2191	2226
10°	1987	2082	2211
15°	1784	1937	2174
20°	1562	1772	2115
25°	1319	1583	2041
30°	1063	1377	1958
35°	782	1161	1866
40°	488	937	1769
45°	183	685	1645
50°	86	427	1518
55°	62	178	1404
60°	44	94	1215
65°	26	111	963
70°	24	129	610
75°	32	128	192
80°	48	159	143
85°	95	253	190

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1645 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.7	7.1
10°-20°	76.9	18.5
20°-30°	98.0	23.5
30°-40°	91.2	21.9
40°-50°	62.5	15.0
50°-60°	34.4	8.3
60°-70°	16.3	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°	204.7	49.1
0°-40°	295.9	71.0
0°-60°	392.9	94.2
0°-90°	416.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	416.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	324	324	324	324	324	
5°	312	316	317	319	322	29
15°	250	258	272	292	305	70
25°	174	184	208	242	269	79
35°	93	106	138	184	222	58
45°	19	32	70	124	169	18
55°	5	6	15	70	117	5
65°	2	2	7	26	59	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°	324.1	324.1	324.1	324.1	324.1
2.5°	320.9	324.1	321.7	321.7	322.1
5°	312.2	316.2	317.0	319.4	322.1
7.5°	299.4	304.6	308.6	315.4	320.2
10°	284.2	290.6	297.8	309.0	316.2
12.5°	268.3	275.0	285.8	301.4	311.4
15°	250.3	258.3	271.8	292.2	305.0
17.5°	231.9	240.7	257.5	281.4	297.4
20°	213.2	222.3	241.9	268.7	288.6
22.5°	193.6	203.6	225.1	255.5	279.0
25°	173.6	184.4	208.4	241.9	268.7
27.5°	153.7	164.9	191.2	227.9	257.9
30°	133.7	145.3	173.2	213.6	246.3
32.5°	113.4	126.1	155.7	199.2	234.3
35°	93.0	106.2	138.1	183.6	222.0
37.5°	73.1	86.6	121.0	168.9	209.6
40°	54.3	67.9	104.2	154.1	196.8
42.5°	35.1	49.5	86.6	138.9	182.8
45°	18.8	31.5	70.3	124.5	168.9
47.5°	10.0	16.8	54.7	110.2	155.7
50°	8.0	9.2	39.9	95.8	141.7
52.5°	6.4	7.2	25.5	81.0	129.3
55°	5.2	6.0	14.8	69.5	117.0
57.5°	4.0	4.8	8.4	57.9	102.6
60°	3.2	3.6	6.8	46.3	88.2
62.5°	2.0	2.8	6.8	35.9	73.9
65°	1.6	2.0	6.8	25.5	59.1
67.5°	1.6	1.6	6.8	16.8	44.3
70°	1.2	1.2	6.4	10.8	30.3
72.5°	1.2	1.2	5.6	7.2	17.6
75°	1.2	2.0	4.8	5.2	7.2
77.5°	1.2	3.2	4.4	4.4	4.0
80°	1.2	3.2	4.0	3.6	3.6
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	11.84	13.12	12.20	13.43	13.75
	3H	0.00	0.00	0.00	0.00	0.00	12.62	13.76	13.00	14.09	14.46
	4H	0.00	0.00	0.00	0.00	0.00	12.65	13.71	13.05	14.06	14.44
	6H	0.00	0.00	0.00	0.00	0.00	12.61	13.58	13.02	13.95	14.34
	8H	0.00	0.00	0.00	0.00	0.00	12.58	13.50	13.01	13.89	14.30
	12H	0.00	0.00	0.00	0.00	0.00	12.56	13.44	13.00	13.82	14.25
4H	2H	0.00	0.00	0.00	0.00	0.00	11.62	12.68	12.02	13.03	13.41
	3H	0.00	0.00	0.00	0.00	0.00	12.45	13.31	12.86	13.71	14.12
	4H	0.00	0.00	0.00	0.00	0.00	12.48	13.25	12.92	13.67	14.12
	6H	0.00	0.00	0.00	0.00	0.17	12.47	13.13	12.93	13.58	14.05
	8H	0.00	0.00	0.00	0.40	0.88	12.45	13.07	12.92	13.52	13.99
	12H	0.08	0.63	0.57	1.11	1.58	12.45	13.00	12.94	13.49	13.96
8H	4H	0.00	0.00	0.00	0.21	0.68	12.37	12.99	12.84	13.43	13.91
	6H	0.89	1.39	1.39	1.89	2.37	12.37	12.87	12.87	13.37	13.85
	8H	1.84	2.29	2.36	2.81	3.30	12.38	12.83	12.90	13.35	13.84
	12H	2.77	3.17	3.29	3.67	4.24	12.42	12.82	12.94	13.32	13.89
12H	4H	0.00	0.00	0.00	0.47	0.95	12.33	12.87	12.81	13.36	13.83
	6H	1.34	1.80	1.87	2.31	2.81	12.32	12.78	12.85	13.29	13.79
	8H	2.47	2.88	2.99	3.37	3.94	12.36	12.76	12.88	13.26	13.83