

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: P1062042

Luminaire Tested: S125RDR-H375D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062042  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D927-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

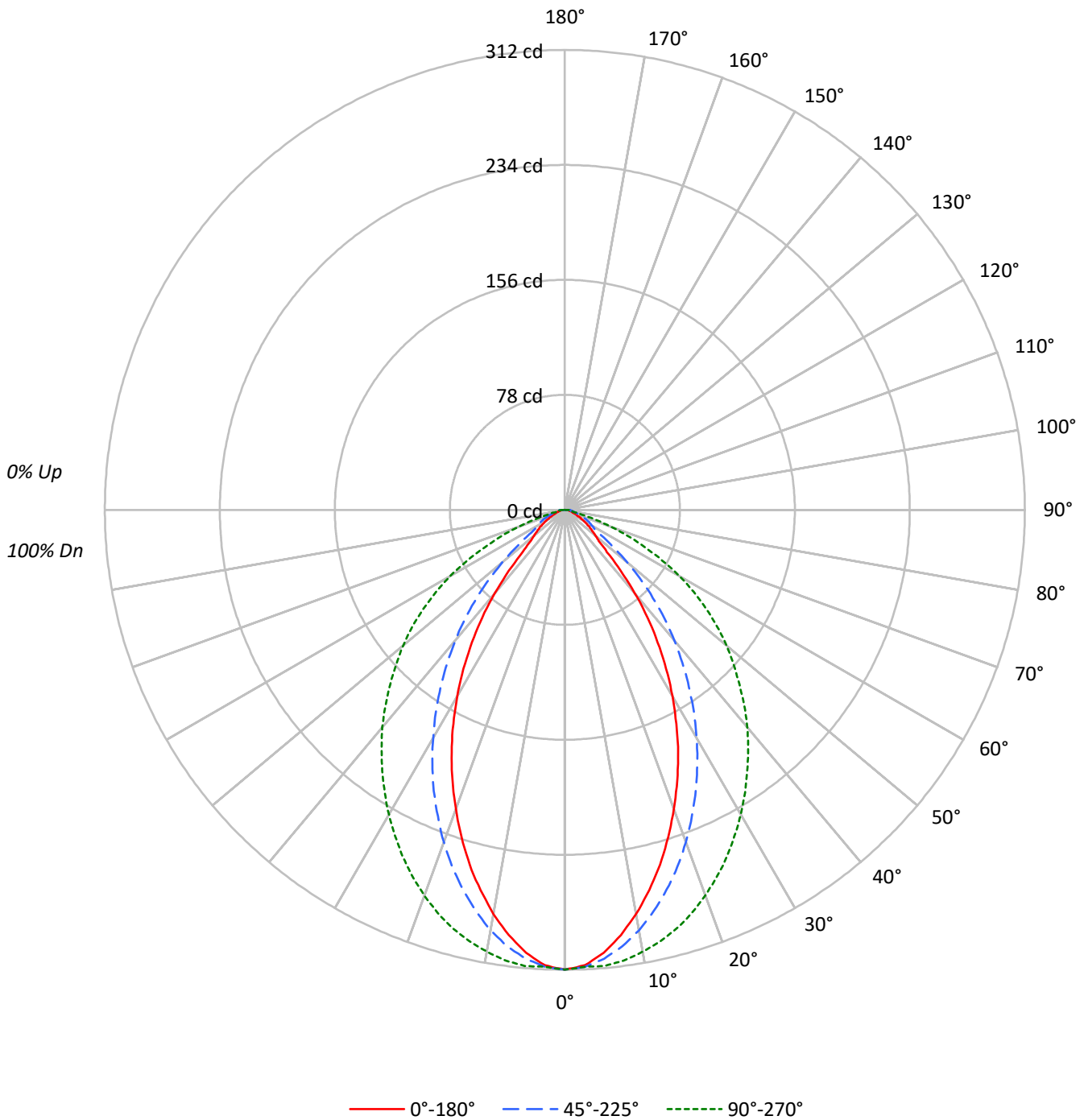
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 451.8 lumens  
Efficiency: N/A  
Efficacy: 38.6 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

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

	0°	45°	90°
0°	2148	2148	2148
5°	2085	2112	2147
10°	1946	2025	2127
15°	1777	1902	2096
20°	1583	1759	2040
25°	1380	1597	1974
30°	1160	1421	1898
35°	922	1234	1814
40°	664	1037	1731
45°	393	823	1630
50°	291	586	1534
55°	247	363	1404
60°	201	292	1237
65°	156	270	978
70°	133	234	654
75°	122	202	263
80°	131	210	182
85°	158	316	213

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1630 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.7	6.4
10°-20°	75.5	16.7
20°-30°	98.7	21.8
30°-40°	96.1	21.3
40°-50°	72.1	16.0
50°-60°	45.2	10.0
60°-70°	23.5	5.2
70°-80°	8.5	1.9
80°-90°	3.4	0.7
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°	202.9	44.9
0°-40°	299.1	66.2
0°-60°	416.4	92.2
0°-90°	451.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	451.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	312	312	312	312	312	
5°	302	306	306	308	311	28
15°	249	257	267	283	294	70
25°	182	192	210	239	260	83
35°	110	121	147	186	216	68
45°	40	52	84	131	167	34
55°	21	22	30	79	117	18
65°	10	10	17	32	60	10
75°	5	6	8	8	10	5
85°	2	3	4	4	3	2
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	311.9	311.9	311.9	311.9	311.9
2.5°	309.3	312.3	310.3	310.3	310.3
5°	301.6	305.6	305.6	307.9	310.6
7.5°	291.0	295.7	298.7	304.3	308.3
10°	278.4	284.1	289.7	299.0	304.3
12.5°	264.2	270.8	278.8	291.7	299.7
15°	249.3	256.6	266.8	283.4	294.0
17.5°	233.0	241.6	253.9	273.8	286.7
20°	216.1	224.7	240.0	262.5	278.4
22.5°	199.2	208.5	225.1	250.6	269.5
25°	181.7	191.6	210.2	238.7	259.9
27.5°	163.8	174.0	194.6	226.4	249.3
30°	145.9	156.5	178.7	213.1	238.7
32.5°	128.0	139.2	162.8	199.6	227.4
35°	109.7	121.3	146.8	186.0	215.8
37.5°	92.2	103.8	130.9	172.0	204.2
40°	73.9	86.5	115.4	158.1	192.6
42.5°	56.0	68.9	99.8	144.2	180.0
45°	40.4	52.4	84.5	130.6	167.4
47.5°	31.2	37.8	68.9	116.7	155.1
50°	27.2	29.2	54.7	103.8	143.2
52.5°	23.5	24.9	41.1	91.8	130.3
55°	20.6	21.5	30.2	78.9	117.0
57.5°	17.2	18.6	23.9	66.3	103.4
60°	14.6	15.2	21.2	54.7	89.8
62.5°	11.9	12.6	18.9	43.1	74.6
65°	9.6	10.3	16.6	31.8	60.0
67.5°	8.0	8.3	13.9	22.5	46.1
70°	6.6	7.0	11.6	15.6	32.5
72.5°	5.6	6.6	9.3	11.3	20.6
75°	4.6	6.3	7.6	8.0	9.9
77.5°	4.0	6.0	6.3	6.3	5.6
80°	3.3	5.0	5.3	5.0	4.6
82.5°	2.7	4.0	4.3	4.3	3.6
85°	2.0	3.3	4.0	3.6	2.7
87.5°	1.3	3.0	3.3	3.0	2.0
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	2.58	3.93	2.95	4.25	4.56	12.19	13.54	12.55	13.85	14.17
	3H	3.44	4.64	3.82	4.97	5.34	13.03	14.23	13.41	14.56	14.92
	4H	3.86	4.98	4.26	5.33	5.71	13.10	14.22	13.50	14.57	14.95
	6H	4.29	5.32	4.70	5.69	6.08	13.08	14.11	13.50	14.48	14.88
	8H	4.47	5.45	4.90	5.84	6.24	13.07	14.05	13.50	14.44	14.84
	12H	4.64	5.57	5.07	5.95	6.38	13.06	13.99	13.49	14.37	14.80
4H	2H	3.54	4.66	3.95	5.01	5.40	12.05	13.17	12.45	13.52	13.90
	3H	4.60	5.51	5.01	5.92	6.32	12.96	13.88	13.37	14.28	14.68
	4H	5.16	5.98	5.59	6.39	6.84	13.06	13.88	13.50	14.30	14.74
	6H	5.76	6.47	6.22	6.91	7.38	13.09	13.80	13.55	14.24	14.71
	8H	6.00	6.66	6.47	7.11	7.58	13.09	13.75	13.56	14.20	14.67
	12H	6.23	6.82	6.72	7.30	7.77	13.10	13.69	13.59	14.17	14.64
8H	4H	5.63	6.29	6.10	6.74	7.21	12.99	13.65	13.46	14.09	14.57
	6H	6.45	6.99	6.95	7.48	7.96	13.04	13.58	13.54	14.08	14.56
	8H	6.83	7.32	7.35	7.83	8.32	13.07	13.56	13.59	14.07	14.57
	12H	7.22	7.65	7.74	8.15	8.72	13.14	13.57	13.65	14.06	14.63
12H	4H	5.68	6.26	6.16	6.75	7.22	12.95	13.54	13.44	14.02	14.50
	6H	6.57	7.05	7.09	7.57	8.06	13.01	13.49	13.53	14.01	14.50
	8H	7.06	7.49	7.57	7.98	8.55	13.08	13.51	13.59	14.00	14.57