

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: P1062022

Luminaire Tested: S125RDR-H375D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062022  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D840-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

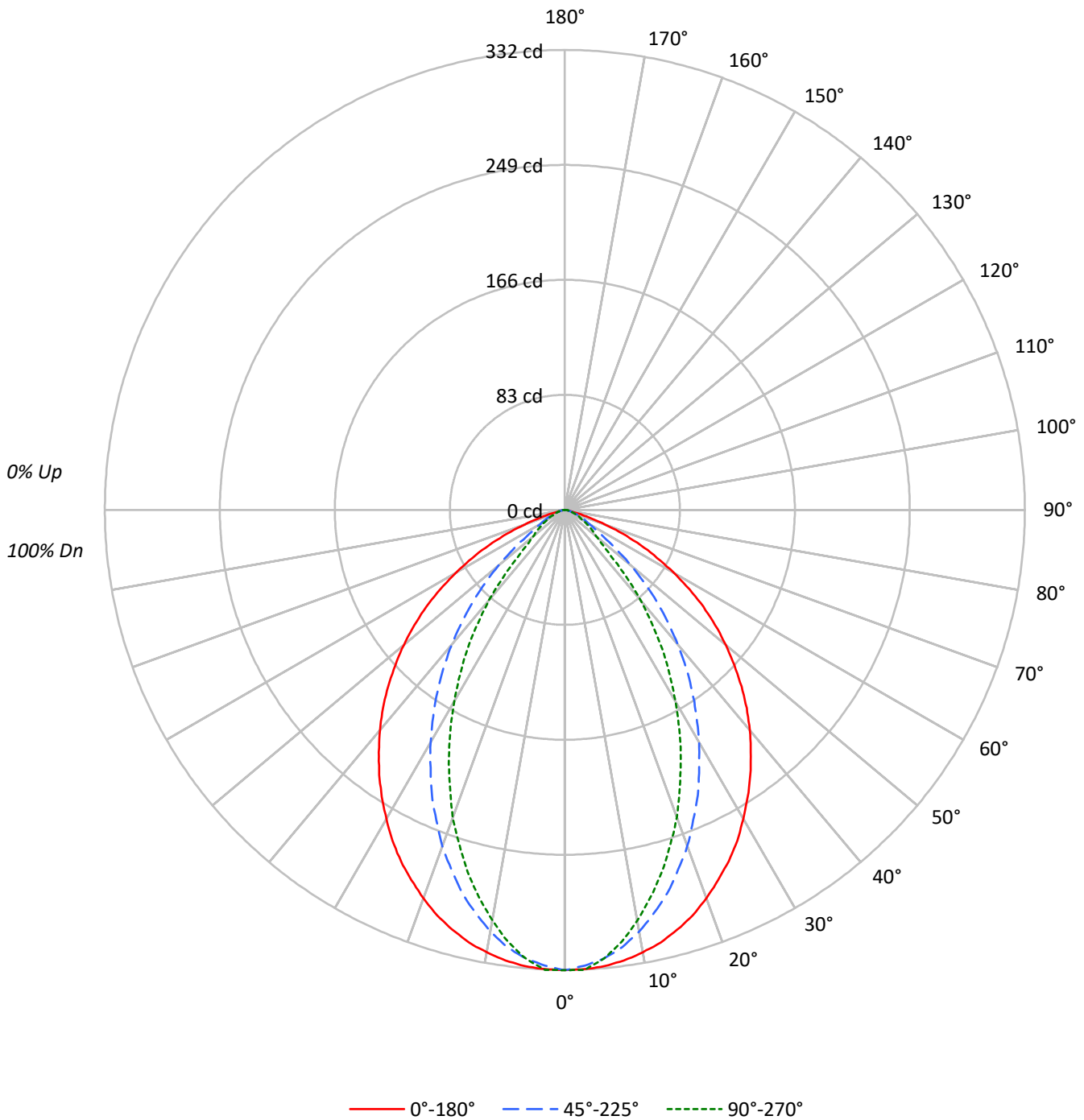
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 480.6 lumens  
Efficiency: N/A  
Efficacy: 41.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	2288	2288	2288
5°	2285	2247	2247
10°	2267	2161	2104
15°	2236	2041	1929
20°	2187	1893	1732
25°	2126	1725	1504
30°	2047	1541	1269
35°	1963	1348	1029
40°	1867	1139	763
45°	1756	912	461
50°	1624	669	317
55°	1464	411	264
60°	1245	280	209
65°	984	213	165
70°	620	153	137
75°	202	112	112
80°	67	83	99
85°	32	63	63

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1756 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.7	6.4
10°-20°	81.2	16.9
20°-30°	106.7	22.2
30°-40°	104.9	21.8
40°-50°	79.4	16.5
50°-60°	48.1	10.0
60°-70°	22.7	4.7
70°-80°	5.9	1.2
80°-90°	0.9	0.2
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°	218.6	45.5
0°-40°	323.5	67.3
0°-60°	451.0	93.9
0°-90°	480.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	480.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	332	332	332	332	332	
5°	331	330	325	326	325	31
15°	314	305	286	275	271	88
25°	280	259	227	206	198	129
35°	234	202	160	132	122	146
45°	180	142	94	60	47	139
55°	122	84	34	23	22	109
65°	60	31	13	11	10	60
75°	8	5	4	4	4	12
85°	0	0	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	332.3	332.3	332.3	332.3	332.3
2.5°	331.9	331.9	329.3	332.3	332.3
5°	330.6	329.7	325.1	325.5	325.1
7.5°	328.1	326.4	318.3	316.2	314.5
10°	324.3	320.9	309.1	304.0	301.0
12.5°	320.0	314.1	298.1	290.9	286.3
15°	313.7	305.3	286.3	275.3	270.6
17.5°	306.9	294.7	272.3	259.2	253.3
20°	298.5	284.1	258.4	242.3	236.4
22.5°	289.2	272.3	242.3	224.6	216.6
25°	279.9	258.8	227.1	206.0	198.0
27.5°	269.4	245.3	209.8	187.9	179.0
30°	257.5	231.8	193.8	171.0	159.6
32.5°	245.7	217.9	176.9	152.0	140.6
35°	233.5	202.2	160.4	132.2	122.4
37.5°	220.4	187.5	143.6	114.0	102.6
40°	207.7	172.7	126.7	95.4	84.9
42.5°	194.2	157.9	109.8	77.3	65.4
45°	180.3	141.9	93.7	59.5	47.3
47.5°	165.9	127.5	77.7	43.9	35.5
50°	151.6	112.3	62.5	32.5	29.6
52.5°	136.8	97.5	47.3	27.0	25.8
55°	122.0	83.6	34.2	23.2	22.0
57.5°	106.8	68.4	25.8	19.8	18.6
60°	90.4	54.9	20.3	16.5	15.2
62.5°	75.2	43.1	16.5	13.5	12.7
65°	60.4	30.8	13.1	11.0	10.1
67.5°	45.2	20.7	10.1	8.4	8.4
70°	30.8	13.5	7.6	6.8	6.8
72.5°	18.6	8.0	5.5	5.5	5.5
75°	7.6	5.1	4.2	4.2	4.2
77.5°	2.5	3.0	3.0	3.4	3.4
80°	1.7	1.7	2.1	2.5	2.5
82.5°	0.8	1.3	1.3	1.7	1.7
85°	0.4	0.4	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.4	0.4
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	12.20	13.54	12.57	13.85	14.16	2.85	4.18	3.22	4.49	4.81
	3H	12.91	14.09	13.29	14.42	14.78	3.63	4.81	4.01	5.14	5.50
	4H	12.93	14.02	13.33	14.37	14.76	3.88	4.98	4.28	5.33	5.71
	6H	12.86	13.86	13.27	14.23	14.63	4.06	5.07	4.47	5.44	5.83
	8H	12.82	13.77	13.25	14.16	14.56	4.10	5.06	4.54	5.45	5.85
	12H	12.78	13.68	13.21	14.07	14.50	4.11	5.02	4.54	5.40	5.83
4H	2H	12.04	13.13	12.44	13.48	13.87	3.34	4.44	3.74	4.79	5.17
	3H	12.78	13.67	13.19	14.08	14.48	4.25	5.14	4.66	5.55	5.95
	4H	12.80	13.60	13.24	14.01	14.46	4.56	5.36	5.00	5.78	6.22
	6H	12.74	13.42	13.20	13.87	14.34	4.82	5.51	5.28	5.95	6.42
	8H	12.69	13.33	13.16	13.77	14.24	4.89	5.53	5.36	5.97	6.44
	12H	12.64	13.21	13.13	13.69	14.16	4.91	5.47	5.40	5.96	6.43
8H	4H	12.68	13.32	13.15	13.77	14.24	4.68	5.31	5.15	5.76	6.23
	6H	12.61	13.13	13.11	13.62	14.11	4.99	5.51	5.50	6.01	6.49
	8H	12.55	13.02	13.08	13.54	14.03	5.10	5.56	5.62	6.08	6.57
	12H	12.51	12.92	13.03	13.42	13.99	5.16	5.57	5.67	6.06	6.63
12H	4H	12.64	13.20	13.13	13.69	14.16	4.65	5.21	5.13	5.69	6.17
	6H	12.55	13.02	13.07	13.53	14.02	4.96	5.43	5.49	5.95	6.44
	8H	12.52	12.93	13.03	13.42	13.99	5.10	5.52	5.62	6.01	6.58