

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: P1062013

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062013  
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-H375D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

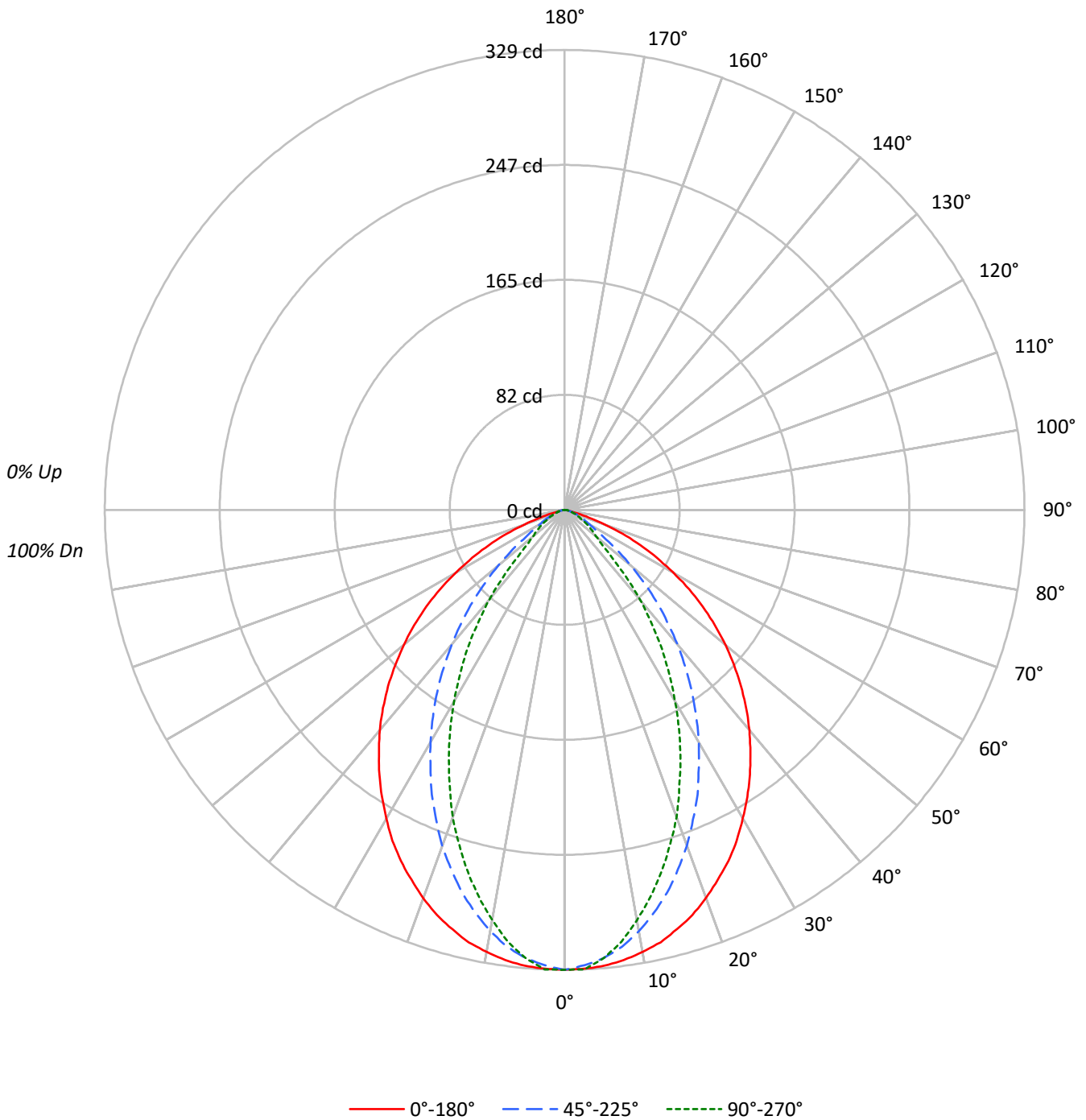
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 475.9 lumens  
Efficiency: N/A  
Efficacy: 40.7 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°	2265	2265	2265
5°	2263	2225	2225
10°	2245	2139	2084
15°	2214	2021	1910
20°	2166	1875	1715
25°	2106	1709	1490
30°	2027	1526	1256
35°	1943	1336	1019
40°	1849	1127	755
45°	1738	904	456
50°	1608	663	314
55°	1450	407	260
60°	1232	277	208
65°	974	212	163
70°	614	151	135
75°	200	112	112
80°	67	83	99
85°	32	63	63

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1738 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.4	6.4
10°-20°	80.4	16.9
20°-30°	105.7	22.2
30°-40°	103.9	21.8
40°-50°	78.6	16.5
50°-60°	47.7	10.0
60°-70°	22.5	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°	216.5	45.5
0°-40°	320.4	67.3
0°-60°	446.6	93.9
0°-90°	475.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	475.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	329	329	329	329	329	
5°	327	326	322	322	322	31
15°	311	302	284	273	268	87
25°	277	256	225	204	196	127
35°	231	200	159	131	121	144
45°	178	140	93	59	47	137
55°	121	83	34	23	22	108
65°	60	30	13	11	10	59
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°	329.0	329.0	329.0	329.0	329.0
2.5°	328.6	328.6	326.1	329.0	329.0
5°	327.4	326.5	321.9	322.3	321.9
7.5°	324.9	323.2	315.2	313.1	311.5
10°	321.1	317.7	306.0	301.0	298.1
12.5°	316.9	311.1	295.2	288.1	283.5
15°	310.6	302.3	283.5	272.6	268.0
17.5°	303.9	291.8	269.7	256.7	250.9
20°	295.6	281.4	255.9	240.0	234.1
22.5°	286.4	269.7	240.0	222.4	214.5
25°	277.2	256.3	224.9	204.0	196.1
27.5°	266.7	242.9	207.8	186.0	177.3
30°	255.0	229.5	191.9	169.3	158.0
32.5°	243.3	215.7	175.2	150.5	139.2
35°	231.2	200.3	158.9	130.9	121.2
37.5°	218.2	185.6	142.1	112.9	101.6
40°	205.7	171.0	125.4	94.5	84.0
42.5°	192.3	156.4	108.7	76.5	64.8
45°	178.5	140.5	92.8	59.0	46.8
47.5°	164.3	126.3	76.9	43.5	35.1
50°	150.1	111.2	61.9	32.2	29.3
52.5°	135.5	96.6	46.8	26.8	25.5
55°	120.8	82.8	33.9	23.0	21.7
57.5°	105.8	67.7	25.5	19.7	18.4
60°	89.5	54.4	20.1	16.3	15.1
62.5°	74.4	42.6	16.3	13.4	12.5
65°	59.8	30.5	13.0	10.9	10.0
67.5°	44.7	20.5	10.0	8.4	8.4
70°	30.5	13.4	7.5	6.7	6.7
72.5°	18.4	7.9	5.4	5.4	5.4
75°	7.5	5.0	4.2	4.2	4.2
77.5°	2.5	2.9	2.9	3.3	3.3
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	12.17	13.50	12.53	13.81	14.13	2.84	4.17	3.21	4.48	4.80
	3H	12.87	14.05	13.25	14.38	14.75	3.62	4.80	4.00	5.13	5.50
	4H	12.89	13.99	13.29	14.34	14.72	3.87	4.97	4.27	5.32	5.70
	6H	12.82	13.83	13.24	14.20	14.59	4.04	5.05	4.46	5.42	5.81
	8H	12.78	13.73	13.21	14.12	14.53	4.09	5.04	4.52	5.43	5.84
	12H	12.74	13.65	13.17	14.03	14.46	4.10	5.01	4.53	5.39	5.82
4H	2H	12.00	13.10	12.40	13.45	13.83	3.33	4.42	3.73	4.77	5.16
	3H	12.75	13.64	13.16	14.04	14.45	4.23	5.13	4.65	5.53	5.93
	4H	12.76	13.56	13.20	13.98	14.42	4.55	5.34	4.98	5.76	6.20
	6H	12.70	13.39	13.17	13.83	14.30	4.80	5.48	5.26	5.93	6.40
	8H	12.65	13.29	13.12	13.74	14.21	4.87	5.51	5.34	5.95	6.42
	12H	12.61	13.17	13.09	13.65	14.13	4.89	5.45	5.38	5.94	6.41
8H	4H	12.65	13.28	13.12	13.73	14.20	4.66	5.30	5.13	5.74	6.21
	6H	12.57	13.09	13.07	13.59	14.07	4.97	5.49	5.47	5.99	6.47
	8H	12.52	12.98	13.04	13.50	13.99	5.08	5.54	5.60	6.06	6.55
	12H	12.48	12.89	12.99	13.38	13.95	5.14	5.55	5.65	6.04	6.61
12H	4H	12.60	13.17	13.09	13.65	14.12	4.63	5.19	5.12	5.67	6.15
	6H	12.51	12.98	13.04	13.50	13.99	4.94	5.41	5.46	5.92	6.42
	8H	12.48	12.89	12.99	13.39	13.96	5.08	5.49	5.60	5.99	6.56