

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061607

Luminaire Tested: S125RDRP-S375D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061607  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S375D835-X4F0-XX-UDD-BVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

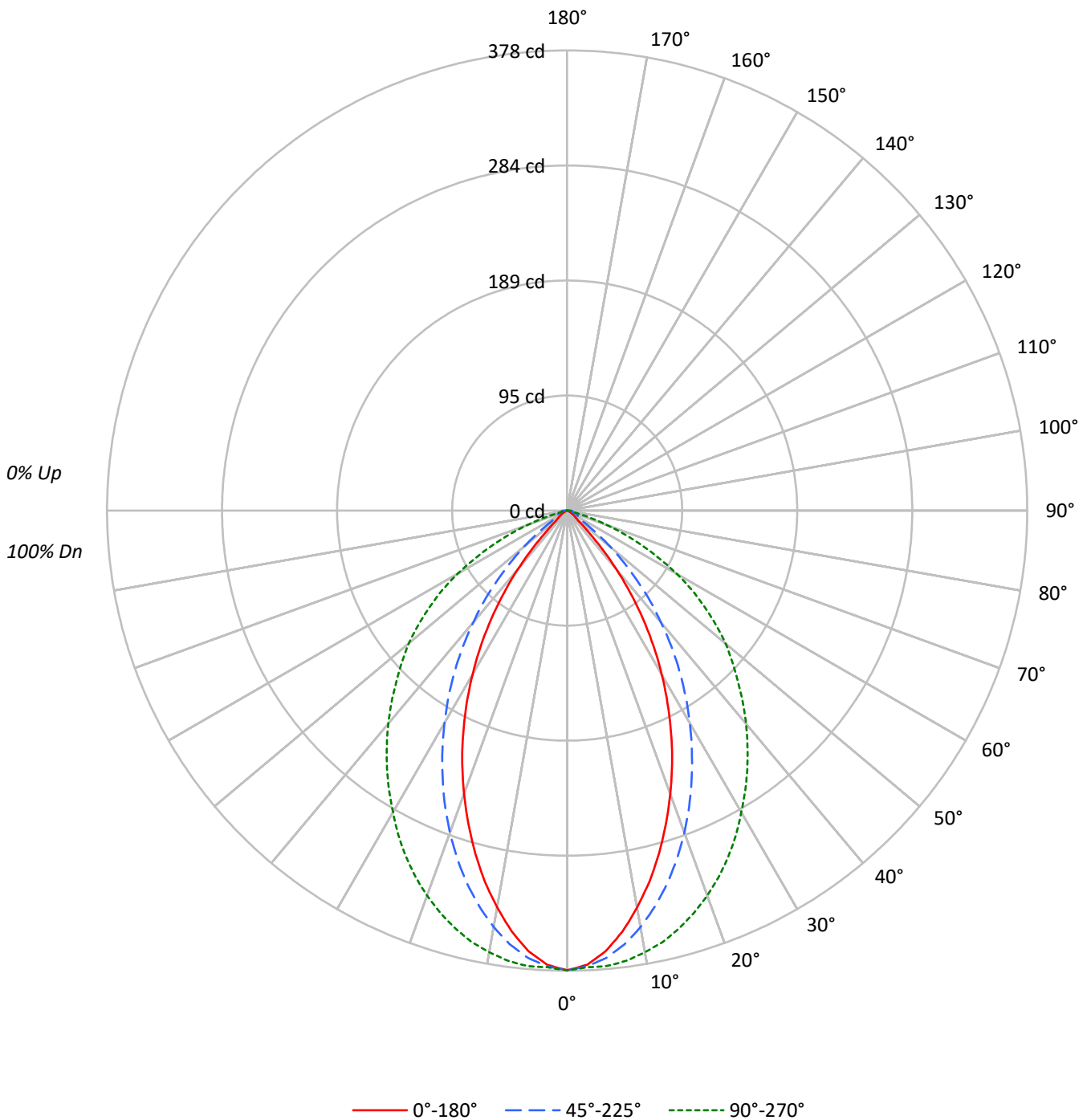
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 488.5 lumens  
Efficiency: N/A  
Efficacy: 39.1 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): 12.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	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	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			80									
3	98	89	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	67	74	70	67	65																			65									
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59																			59									
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53																			53									
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49																			49									
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45																			45									
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41																			41									
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38																			38									

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

	0°	45°	90°
0°	2600	2600	2600
5°	2511	2549	2595
10°	2314	2429	2575
15°	2079	2261	2533
20°	1813	2063	2466
25°	1536	1839	2381
30°	1234	1601	2275
35°	914	1351	2169
40°	565	1079	2055
45°	221	789	1932
50°	103	494	1820
55°	76	211	1652
60°	52	150	1432
65°	34	156	1114
70°	34	143	701
75°	45	146	223
80°	67	167	151
85°	103	332	229

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1932 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.6	7.1
10°-20°	89.7	18.4
20°-30°	114.3	23.4
30°-40°	106.4	21.8
40°-50°	73.2	15.0
50°-60°	41.4	8.5
60°-70°	19.6	4.0
70°-80°	6.1	1.3
80°-90°	3.2	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°	238.6	48.8
0°-40°	345.0	70.6
0°-60°	459.6	94.1
0°-90°	488.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	488.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	363	368	369	372	376	34
15°	292	301	317	341	355	81
25°	202	215	242	283	313	92
35°	109	124	161	216	258	67
45°	23	36	81	146	198	21
55°	6	7	18	84	138	6
65°	2	2	10	30	68	2
75°	2	4	6	6	8	2
85°	1	3	4	4	3	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	377.6	377.6	377.6	377.6	377.6
2.5°	373.4	377.2	374.6	375.1	375.5
5°	363.3	368.3	368.8	372.1	375.5
7.5°	348.6	354.9	359.5	367.5	373.0
10°	331.0	338.6	347.4	360.4	368.3
12.5°	312.1	320.9	333.1	351.6	362.9
15°	291.6	301.2	317.2	341.1	355.3
17.5°	269.8	280.7	300.0	328.5	346.5
20°	247.5	259.3	281.5	314.2	336.5
22.5°	225.3	237.5	262.2	298.7	325.6
25°	202.2	215.2	242.1	282.8	313.4
27.5°	178.7	192.1	221.9	266.4	300.4
30°	155.2	169.5	201.4	249.6	286.1
32.5°	132.2	146.4	181.2	232.8	272.3
35°	108.7	123.8	160.7	215.6	258.0
37.5°	85.2	101.5	140.5	198.0	243.3
40°	62.9	78.5	120.0	180.8	228.6
42.5°	42.0	57.1	101.5	163.6	213.5
45°	22.7	36.1	81.0	146.4	198.4
47.5°	12.2	19.3	63.3	129.6	183.8
50°	9.6	10.9	46.1	114.1	169.9
52.5°	8.0	8.8	30.2	99.4	154.0
55°	6.3	7.1	17.6	84.3	137.6
57.5°	5.0	5.9	11.3	70.1	121.7
60°	3.8	4.6	10.9	56.2	104.0
62.5°	2.9	3.4	10.1	43.2	85.6
65°	2.1	2.5	9.6	30.2	68.4
67.5°	1.7	2.1	8.8	19.3	51.2
70°	1.7	1.7	7.1	12.6	34.8
72.5°	1.7	2.9	6.3	8.4	21.0
75°	1.7	3.8	5.5	5.9	8.4
77.5°	1.7	4.2	4.6	4.6	4.6
80°	1.7	3.8	4.2	4.2	3.8
82.5°	1.7	3.4	3.8	4.2	3.4
85°	1.3	3.4	4.2	3.8	2.9
87.5°	1.3	3.4	3.8	3.4	2.1
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	12.57	13.86	12.93	14.17	14.49
	3H	0.00	0.00	0.00	0.00	0.00	13.29	14.43	13.67	14.76	15.12
	4H	0.00	0.00	0.00	0.00	0.00	13.31	14.37	13.71	14.72	15.11
	6H	0.00	0.00	0.00	0.00	0.00	13.26	14.24	13.68	14.61	15.00
	8H	0.00	0.00	0.00	0.00	0.00	13.24	14.16	13.67	14.55	14.96
	12H	0.00	0.00	0.00	0.00	0.00	13.22	14.10	13.65	14.49	14.92
4H	2H	0.00	0.00	0.00	0.00	0.00	12.36	13.42	12.76	13.77	14.16
	3H	0.00	0.00	0.00	0.00	0.00	13.11	13.98	13.53	14.39	14.79
	4H	0.00	0.00	0.00	0.10	0.54	13.14	13.92	13.58	14.34	14.78
	6H	0.19	0.86	0.66	1.31	1.77	13.12	13.79	13.59	14.24	14.70
	8H	0.78	1.41	1.25	1.85	2.33	13.11	13.73	13.58	14.18	14.65
	12H	1.36	1.91	1.85	2.40	2.87	13.11	13.66	13.60	14.15	14.62
8H	4H	0.32	0.94	0.79	1.39	1.86	13.03	13.65	13.50	14.10	14.57
	6H	1.89	2.40	2.39	2.90	3.38	13.02	13.52	13.52	14.02	14.50
	8H	2.70	3.16	3.22	3.67	4.16	13.03	13.49	13.55	14.00	14.49
	12H	3.56	3.96	4.07	4.45	5.03	13.09	13.49	13.60	13.99	14.56
12H	4H	0.54	1.09	1.03	1.57	2.05	12.98	13.53	13.47	14.02	14.49
	6H	2.26	2.72	2.79	3.24	3.73	12.97	13.43	13.49	13.94	14.44
	8H	3.27	3.67	3.78	4.17	4.74	13.02	13.42	13.53	13.92	14.49