

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: P1061606

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061606  
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: S125RDRP-S375D835-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

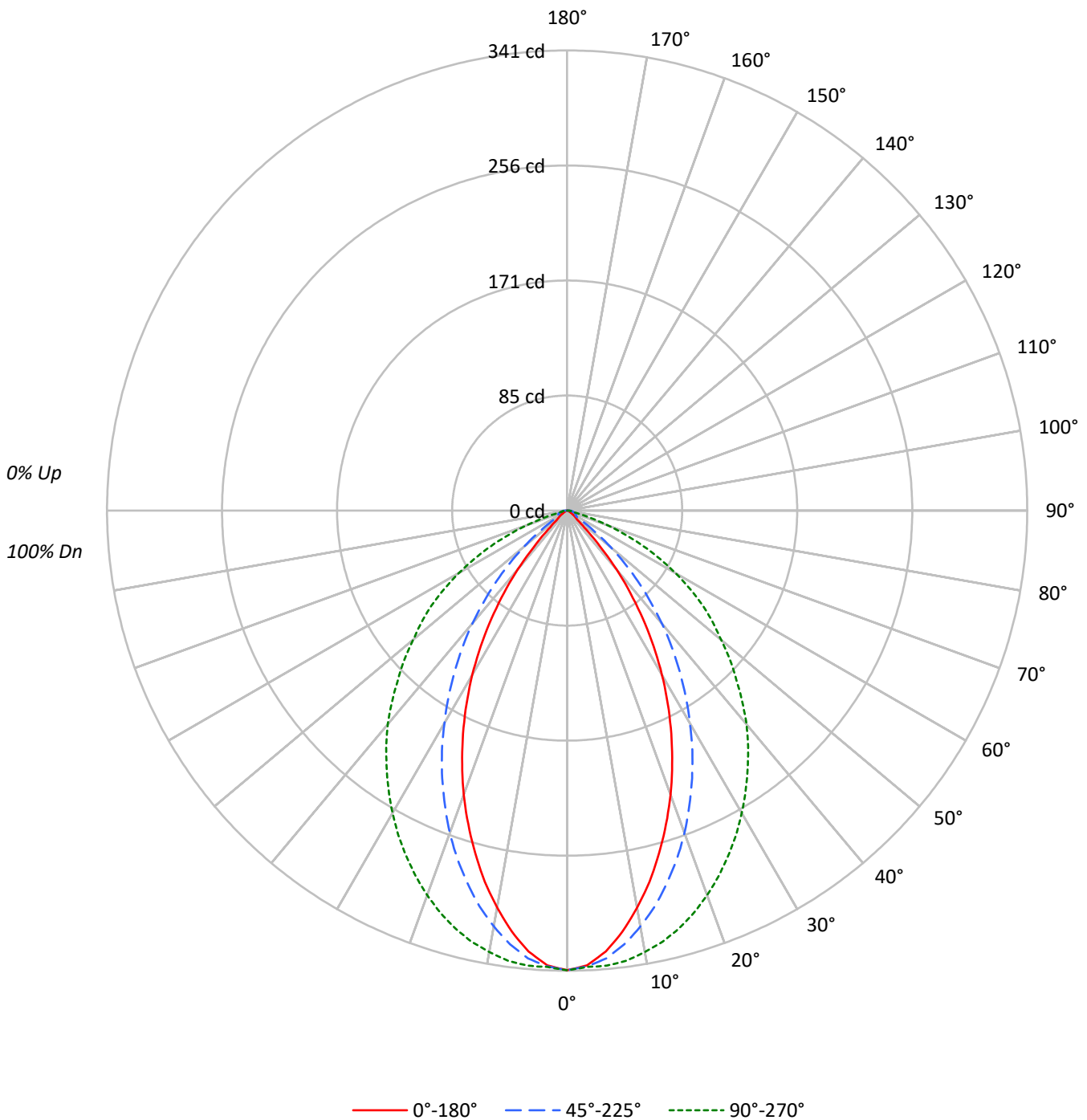
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 438.1 lumens  
Efficiency: N/A  
Efficacy: 35.0 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 (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	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	98	98	96	95	95	93	92	90																												
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81																												
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72																												
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65																												
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59																												
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54																												
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49																												
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45																												
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42																												
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39																												

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

	0°	45°	90°
0°	2345	2345	2345
5°	2267	2302	2340
10°	2088	2188	2323
15°	1875	2037	2285
20°	1641	1863	2222
25°	1386	1664	2145
30°	1117	1447	2058
35°	821	1220	1960
40°	512	984	1859
45°	192	719	1727
50°	90	449	1595
55°	66	186	1475
60°	47	98	1277
65°	28	116	1012
70°	26	135	642
75°	35	133	202
80°	52	167	151
85°	103	269	197

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1727 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.2	7.1
10°-20°	80.9	18.5
20°-30°	103.0	23.5
30°-40°	95.9	21.9
40°-50°	65.7	15.0
50°-60°	36.2	8.3
60°-70°	17.1	3.9
70°-80°	5.4	1.2
80°-90°	2.8	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°	215.1	49.1
0°-40°	311.0	71.0
0°-60°	412.8	94.2
0°-90°	438.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	438.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	341	341	341	341	341	
5°	328	332	333	336	338	30
15°	263	271	286	307	320	73
25°	182	194	219	254	282	83
35°	98	112	145	193	233	61
45°	20	33	74	131	177	19
55°	6	6	16	73	123	5
65°	2	2	7	27	62	2
75°	1	2	5	6	8	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°	340.6	340.6	340.6	340.6	340.6
2.5°	337.3	340.6	338.1	338.1	338.5
5°	328.0	332.2	333.1	335.6	338.5
7.5°	314.6	320.1	324.2	331.4	336.4
10°	298.7	305.4	312.9	324.7	332.2
12.5°	281.9	289.0	300.3	316.7	327.2
15°	263.0	271.4	285.7	307.1	320.5
17.5°	243.7	252.9	270.6	295.7	312.5
20°	224.0	233.6	254.2	282.3	303.3
22.5°	203.4	213.9	236.6	268.5	293.2
25°	182.5	193.8	219.0	254.2	282.3
27.5°	161.5	173.2	200.9	239.5	271.0
30°	140.5	152.7	182.0	224.4	258.8
32.5°	119.1	132.6	163.6	209.3	246.2
35°	97.7	111.6	145.1	193.0	233.2
37.5°	76.8	91.0	127.1	177.4	220.2
40°	57.0	71.3	109.5	161.9	206.8
42.5°	36.9	52.0	91.0	146.0	192.1
45°	19.7	33.1	73.8	130.9	177.4
47.5°	10.5	17.6	57.5	115.8	163.6
50°	8.4	9.6	41.9	100.7	148.9
52.5°	6.7	7.6	26.8	85.2	135.9
55°	5.5	6.3	15.5	73.0	122.9
57.5°	4.2	5.0	8.8	60.8	107.8
60°	3.4	3.8	7.1	48.7	92.7
62.5°	2.1	2.9	7.1	37.8	77.6
65°	1.7	2.1	7.1	26.8	62.1
67.5°	1.7	1.7	7.1	17.6	46.6
70°	1.3	1.3	6.7	11.3	31.9
72.5°	1.3	1.3	5.9	7.6	18.5
75°	1.3	2.1	5.0	5.5	7.6
77.5°	1.3	3.4	4.6	4.6	4.2
80°	1.3	3.4	4.2	3.8	3.8
82.5°	1.3	3.4	3.4	3.4	2.9
85°	1.3	2.9	3.4	2.9	2.5
87.5°	1.3	2.9	2.9	2.9	1.7
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	12.00	13.29	12.37	13.60	13.92
	3H	0.00	0.00	0.00	0.00	0.00	12.79	13.93	13.17	14.26	14.63
	4H	0.00	0.00	0.00	0.00	0.00	12.82	13.88	13.22	14.23	14.61
	6H	0.00	0.00	0.00	0.00	0.00	12.78	13.75	13.19	14.12	14.51
	8H	0.00	0.00	0.00	0.00	0.00	12.75	13.67	13.18	14.06	14.47
	12H	0.00	0.00	0.00	0.00	0.00	12.73	13.61	13.17	13.99	14.43
4H	2H	0.00	0.00	0.00	0.00	0.00	11.79	12.85	12.19	13.20	13.58
	3H	0.00	0.00	0.00	0.00	0.00	12.62	13.48	13.03	13.88	14.29
	4H	0.00	0.00	0.00	0.00	0.00	12.65	13.42	13.09	13.84	14.29
	6H	0.00	0.00	0.00	0.00	0.38	12.64	13.30	13.10	13.75	14.22
	8H	0.00	0.19	0.04	0.63	1.10	12.62	13.24	13.09	13.69	14.16
	12H	0.32	0.86	0.80	1.35	1.82	12.62	13.17	13.11	13.65	14.13
8H	4H	0.00	0.00	0.00	0.37	0.84	12.54	13.16	13.01	13.61	14.08
	6H	1.08	1.59	1.59	2.09	2.57	12.54	13.05	13.04	13.54	14.02
	8H	2.05	2.51	2.57	3.02	3.51	12.55	13.00	13.07	13.52	14.01
	12H	2.98	3.38	3.50	3.88	4.45	12.59	12.99	13.11	13.49	14.06
12H	4H	0.00	0.15	0.09	0.64	1.11	12.50	13.04	12.98	13.53	14.00
	6H	1.54	2.00	2.07	2.51	3.01	12.50	12.95	13.02	13.47	13.96
	8H	2.69	3.09	3.21	3.59	4.16	12.54	12.94	13.05	13.43	14.00