

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: P1062033

Luminaire Tested: S125RDR-H375D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062033  
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-H375D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

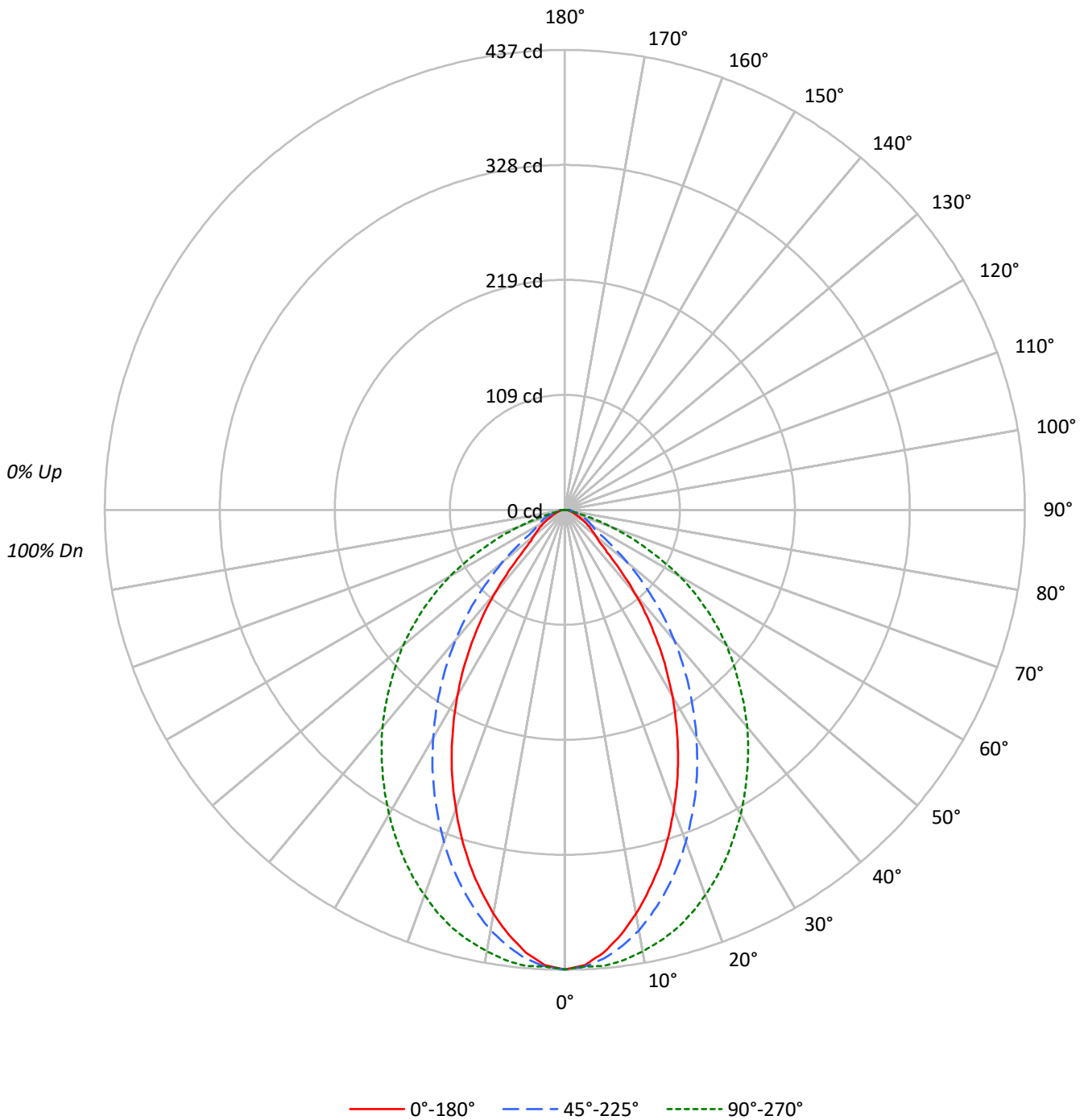
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 632.5 lumens  
Efficiency: N/A  
Efficacy: 54.1 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°	3007	3007	3007
5°	2919	2957	3005
10°	2725	2836	2978
15°	2488	2663	2934
20°	2217	2462	2856
25°	1932	2235	2764
30°	1623	1988	2656
35°	1291	1728	2539
40°	930	1452	2423
45°	551	1152	2281
50°	408	821	2148
55°	346	507	1966
60°	281	409	1732
65°	220	378	1369
70°	187	326	916
75°	173	285	370
80°	182	293	258
85°	221	442	292

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2281 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.2	6.4
10°-20°	105.7	16.7
20°-30°	138.2	21.8
30°-40°	134.6	21.3
40°-50°	100.9	16.0
50°-60°	63.3	10.0
60°-70°	32.9	5.2
70°-80°	11.9	1.9
80°-90°	4.7	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°	284.1	44.9
0°-40°	418.7	66.2
0°-60°	582.9	92.2
0°-90°	632.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	632.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	422	428	428	431	435	39
15°	349	359	374	397	412	97
25°	254	268	294	334	364	116
35°	154	170	206	260	302	95
45°	57	73	118	183	234	48
55°	29	30	42	110	164	26
65°	14	14	23	44	84	14
75°	6	9	11	11	14	7
85°	3	5	6	5	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	436.7	436.7	436.7	436.7	436.7
2.5°	433.0	437.1	434.4	434.4	434.4
5°	422.3	427.9	427.9	431.1	434.8
7.5°	407.4	413.9	418.1	426.0	431.6
10°	389.8	397.7	405.6	418.6	426.0
12.5°	369.8	379.1	390.3	408.4	419.5
15°	349.0	359.2	373.6	396.8	411.6
17.5°	326.2	338.3	355.5	383.3	401.4
20°	302.6	314.6	336.0	367.5	389.8
22.5°	278.9	291.9	315.1	350.8	377.3
25°	254.3	268.2	294.2	334.1	363.8
27.5°	229.2	243.6	272.4	316.9	349.0
30°	204.2	219.0	250.1	298.4	334.1
32.5°	179.1	194.9	227.8	279.4	318.3
35°	153.6	169.8	205.6	260.3	302.1
37.5°	129.0	145.2	183.3	240.8	285.9
40°	103.5	121.1	161.5	221.4	269.6
42.5°	78.4	96.5	139.7	201.9	252.0
45°	56.6	73.3	118.3	182.8	234.3
47.5°	43.6	52.9	96.5	163.3	217.2
50°	38.1	40.8	76.6	145.2	200.5
52.5°	32.9	34.8	57.5	128.5	182.4
55°	28.8	30.2	42.2	110.4	163.8
57.5°	24.1	26.0	33.4	92.8	144.8
60°	20.4	21.3	29.7	76.6	125.8
62.5°	16.7	17.6	26.5	60.3	104.4
65°	13.5	14.4	23.2	44.5	84.0
67.5°	11.1	11.6	19.5	31.6	64.5
70°	9.3	9.7	16.2	21.8	45.5
72.5°	7.9	9.3	13.0	15.8	28.8
75°	6.5	8.8	10.7	11.1	13.9
77.5°	5.6	8.4	8.8	8.8	7.9
80°	4.6	7.0	7.4	7.0	6.5
82.5°	3.7	5.6	6.0	6.0	5.1
85°	2.8	4.6	5.6	5.1	3.7
87.5°	1.9	4.2	4.6	4.2	2.8
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	3.74	5.10	4.11	5.41	5.72	13.35	14.71	13.72	15.02	15.33
	3H	4.60	5.80	4.98	6.13	6.49	14.20	15.40	14.58	15.73	16.09
	4H	5.02	6.14	5.42	6.49	6.87	14.27	15.39	14.67	15.74	16.12
	6H	5.45	6.48	5.87	6.85	7.24	14.25	15.28	14.67	15.65	16.05
	8H	5.63	6.61	6.06	7.00	7.40	14.24	15.22	14.67	15.61	16.01
	12H	5.79	6.73	6.23	7.11	7.54	14.23	15.16	14.66	15.54	15.97
4H	2H	4.71	5.82	5.11	6.18	6.56	13.22	14.34	13.62	14.69	15.07
	3H	5.76	6.67	6.17	7.07	7.48	14.13	15.05	14.54	15.45	15.85
	4H	6.32	7.14	6.75	7.56	8.00	14.23	15.05	14.67	15.47	15.91
	6H	6.92	7.63	7.38	8.08	8.54	14.26	14.97	14.72	15.41	15.88
	8H	7.16	7.82	7.63	8.27	8.74	14.26	14.92	14.73	15.37	15.84
	12H	7.39	7.97	7.87	8.45	8.93	14.27	14.86	14.76	15.34	15.81
8H	4H	6.79	7.45	7.26	7.90	8.37	14.16	14.82	14.62	15.26	15.73
	6H	7.61	8.15	8.11	8.64	9.12	14.21	14.75	14.71	15.25	15.73
	8H	7.99	8.47	8.51	8.99	9.48	14.24	14.73	14.76	15.24	15.73
	12H	8.38	8.81	8.89	9.30	9.87	14.31	14.74	14.82	15.23	15.80
12H	4H	6.84	7.43	7.33	7.91	8.38	14.12	14.71	14.61	15.19	15.66
	6H	7.73	8.22	8.25	8.73	9.22	14.18	14.66	14.70	15.18	15.67
	8H	8.22	8.65	8.73	9.14	9.71	14.25	14.68	14.76	15.17	15.74