

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: P1062017

Luminaire Tested: S125RDR-H375D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062017  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H375D835-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

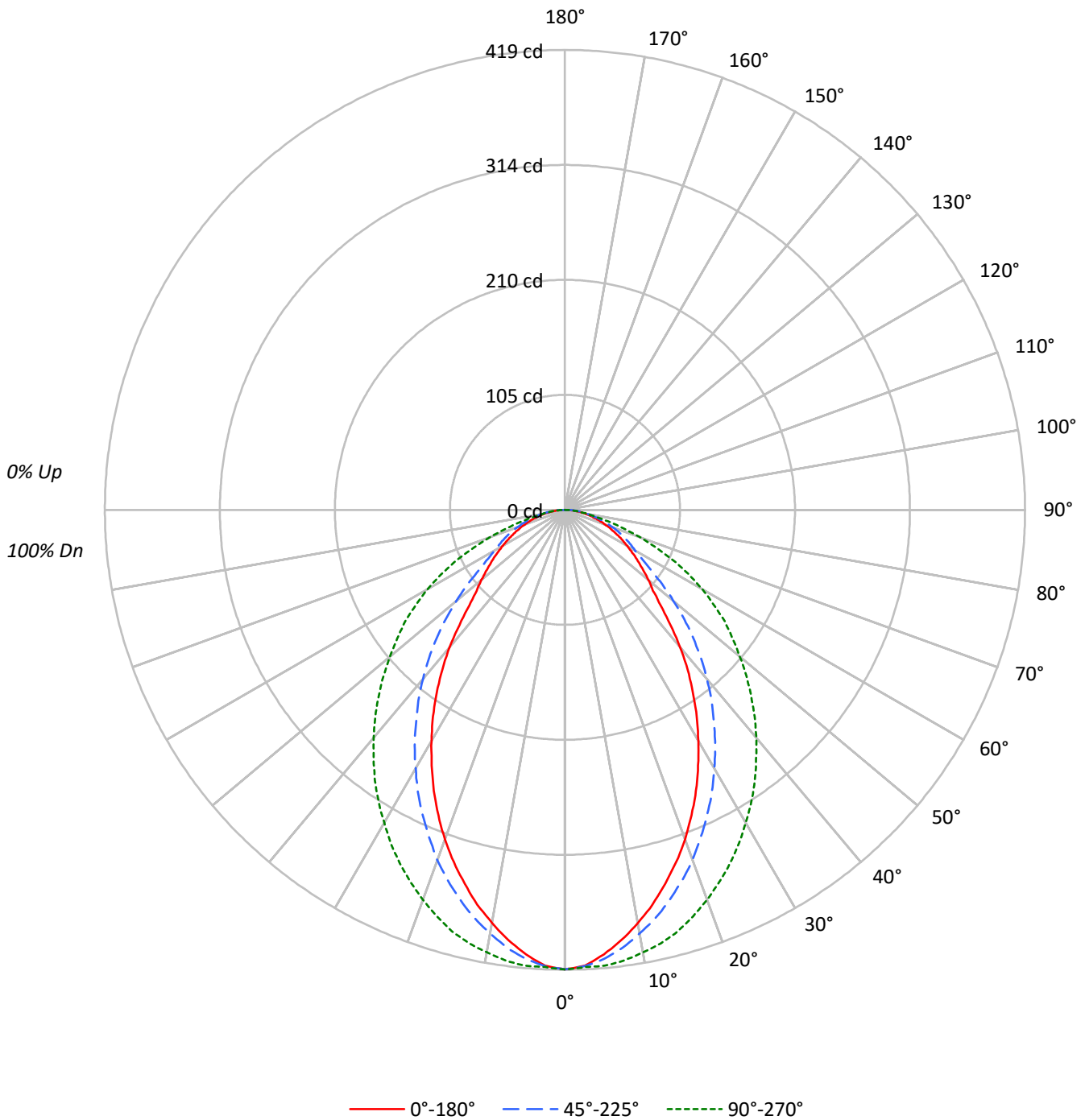
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 784.9 lumens  
Efficiency: N/A  
Efficacy: 67.1 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
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				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				

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

	0°	45°	90°
0°	2883	2883	2883
5°	2810	2839	2882
10°	2673	2740	2863
15°	2513	2624	2833
20°	2342	2488	2770
25°	2145	2329	2701
30°	1932	2162	2617
35°	1709	1986	2535
40°	1466	1808	2436
45°	1198	1609	2334
50°	1062	1380	2227
55°	974	1145	2134
60°	899	1014	1987
65°	837	974	1773
70°	783	926	1447
75°	724	867	1069
80°	678	813	781
85°	624	790	664

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2334 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.7	4.9
10°-20°	104.4	13.3
20°-30°	143.4	18.3
30°-40°	152.0	19.4
40°-50°	132.7	16.9
50°-60°	100.8	12.8
60°-70°	67.5	8.6
70°-80°	34.8	4.4
80°-90°	10.4	1.3
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°	286.6	36.5
0°-40°	438.6	55.9
0°-60°	672.1	85.6
0°-90°	784.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	784.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	407	411	411	414	417	38
15°	353	359	368	384	397	99
25°	282	291	307	332	356	129
35°	203	215	236	270	302	127
45°	123	135	165	204	240	97
55°	81	84	95	140	178	73
65°	51	53	60	80	109	51
75°	27	29	33	35	40	29
85°	8	10	10	9	8	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	418.7	418.7	418.7	418.7	418.7
2.5°	415.8	418.7	416.2	416.2	417.0
5°	406.6	410.7	410.7	413.7	417.0
7.5°	395.3	399.9	402.4	409.1	414.1
10°	382.3	387.3	391.9	402.0	409.5
12.5°	368.5	373.9	381.0	394.0	404.5
15°	352.6	359.3	368.1	384.4	397.4
17.5°	336.7	343.4	354.3	373.5	388.2
20°	319.6	326.7	339.6	360.6	378.1
22.5°	301.2	309.1	322.9	346.7	367.2
25°	282.3	291.1	306.6	332.1	355.5
27.5°	262.7	273.1	289.9	317.1	343.0
30°	243.0	253.5	271.9	301.6	329.2
32.5°	223.4	234.7	254.7	286.1	315.8
35°	203.3	215.0	236.3	269.8	301.6
37.5°	183.6	195.3	219.2	253.9	286.1
40°	163.1	175.3	201.2	237.6	271.0
42.5°	142.2	155.2	183.2	220.8	255.6
45°	123.0	135.1	165.2	204.5	239.7
47.5°	108.8	116.7	147.2	187.8	224.2
50°	99.1	103.3	128.8	171.5	207.9
52.5°	89.5	92.9	111.7	154.8	192.4
55°	81.1	83.7	95.4	140.1	177.8
57.5°	72.8	75.3	82.8	125.5	160.6
60°	65.3	67.3	73.6	110.0	144.3
62.5°	58.1	59.8	66.5	95.4	126.7
65°	51.4	52.7	59.8	79.9	108.8
67.5°	44.8	46.0	53.1	65.3	89.5
70°	38.9	39.3	46.0	53.1	71.9
72.5°	33.0	33.5	38.9	43.1	55.2
75°	27.2	28.9	32.6	34.7	40.2
77.5°	22.2	24.3	26.4	27.2	27.2
80°	17.1	19.7	20.5	20.5	19.7
82.5°	12.5	14.6	15.1	14.2	13.4
85°	7.9	10.0	10.0	9.2	8.4
87.5°	3.8	5.4	5.4	5.0	3.8
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	10.29	11.78	10.65	12.10	12.41	14.21	15.71	14.58	16.02	16.34
	3H	11.86	13.20	12.24	13.53	13.89	15.64	16.98	16.01	17.31	17.67
	4H	12.47	13.73	12.87	14.08	14.46	16.05	17.31	16.45	17.66	18.04
	6H	12.97	14.13	13.38	14.50	14.89	16.27	17.43	16.68	17.80	18.19
	8H	13.14	14.25	13.57	14.64	15.04	16.33	17.43	16.75	17.82	18.22
	12H	13.26	14.32	13.69	14.70	15.13	16.36	17.42	16.79	17.80	18.23
4H	2H	11.02	12.28	11.42	12.63	13.01	14.34	15.60	14.74	15.95	16.33
	3H	12.80	13.85	13.21	14.25	14.65	15.95	16.99	16.36	17.39	17.80
	4H	13.54	14.48	13.97	14.90	15.33	16.48	17.42	16.91	17.83	18.27
	6H	14.18	14.99	14.63	15.44	15.90	16.82	17.64	17.28	18.08	18.54
	8H	14.40	15.17	14.87	15.61	16.08	16.92	17.68	17.38	18.13	18.60
	12H	14.57	15.26	15.06	15.74	16.21	16.99	17.67	17.47	18.15	18.62
8H	4H	13.94	14.70	14.40	15.15	15.62	16.58	17.35	17.05	17.79	18.26
	6H	14.73	15.36	15.22	15.85	16.33	17.02	17.65	17.52	18.15	18.62
	8H	15.05	15.62	15.56	16.13	16.61	17.18	17.75	17.69	18.26	18.75
	12H	15.32	15.82	15.83	16.31	16.88	17.32	17.82	17.83	18.31	18.87
12H	4H	13.98	14.67	14.47	15.14	15.62	16.58	17.27	17.07	17.74	18.22
	6H	14.81	15.38	15.32	15.89	16.38	17.04	17.61	17.55	18.12	18.60
	8H	15.20	15.70	15.71	16.20	16.76	17.25	17.75	17.76	18.24	18.81