

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: P1062026

Luminaire Tested: S125RDR-H375D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062026  
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-H375D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

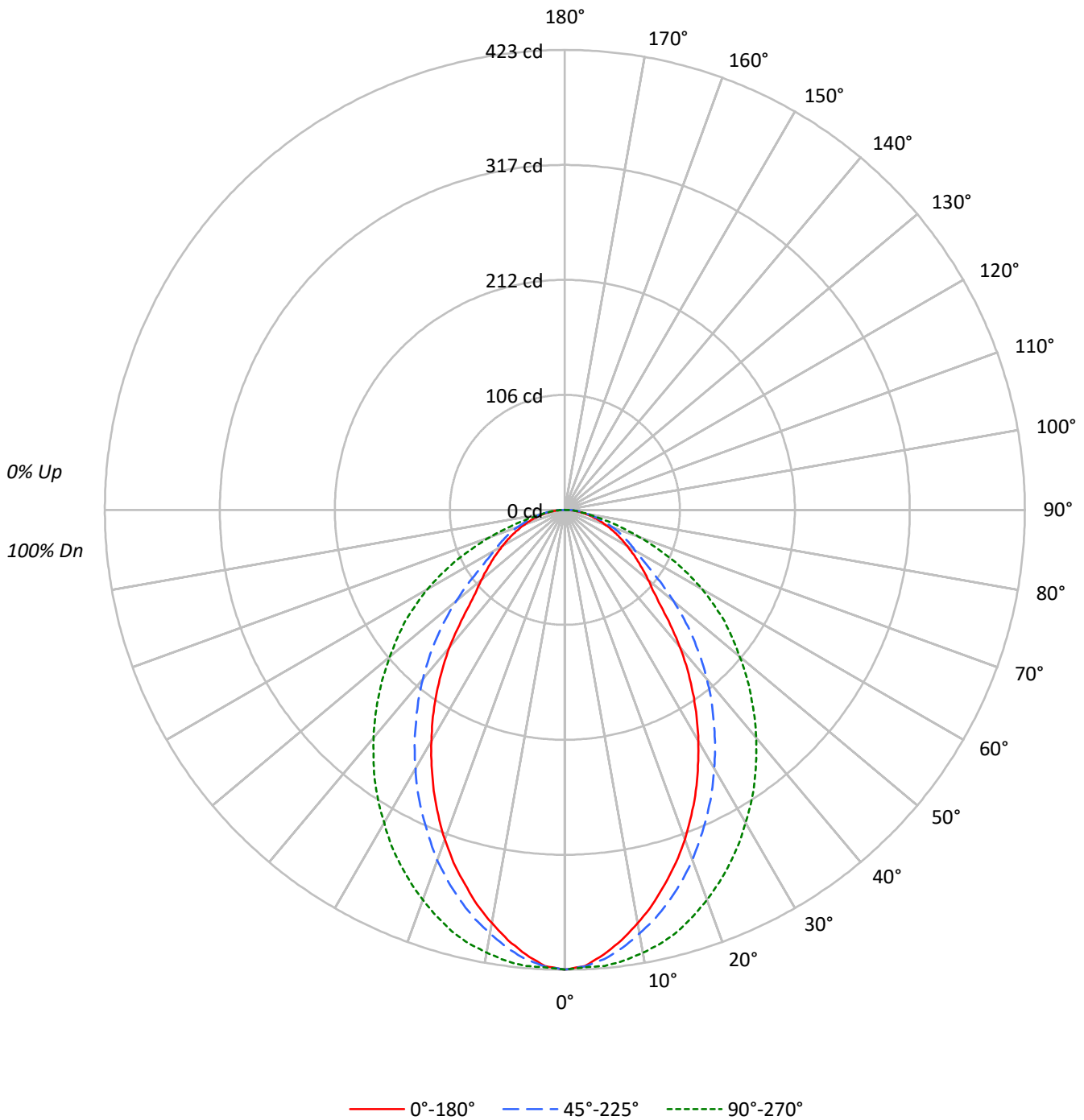
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 792.6 lumens  
Efficiency: N/A  
Efficacy: 67.7 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

TEST NUMBER: P1062026

CATALOG NUMBER: S125RDR-H375D840-X4F0-XX-UDD-WVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1062026

CATALOG NUMBER: S125RDR-H375D840-X4F0-XX-UDD-WVL-S

**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°	2911	2911	2911
5°	2838	2867	2910
10°	2699	2767	2891
15°	2538	2650	2861
20°	2364	2513	2797
25°	2166	2352	2727
30°	1951	2183	2643
35°	1726	2006	2559
40°	1480	1826	2460
45°	1209	1624	2356
50°	1072	1394	2248
55°	983	1156	2155
60°	907	1023	2006
65°	847	984	1789
70°	791	936	1464
75°	732	875	1080
80°	686	821	789
85°	632	798	664

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2356 cd/sqm

TEST NUMBER: P1062026

CATALOG NUMBER: S125RDR-H375D840-X4F0-XX-UDD-WVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.1	4.9
10°-20°	105.4	13.3
20°-30°	144.9	18.3
30°-40°	153.5	19.4
40°-50°	134.0	16.9
50°-60°	101.8	12.8
60°-70°	68.2	8.6
70°-80°	35.2	4.4
80°-90°	10.5	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°	289.4	36.5
0°-40°	442.9	55.9
0°-60°	678.7	85.6
0°-90°	792.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	792.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	423	423	423	423	423	
5°	411	415	415	418	421	38
15°	356	363	372	388	401	100
25°	285	294	310	335	359	131
35°	205	217	239	272	304	128
45°	124	136	167	207	242	98
55°	82	84	96	142	180	73
65°	52	53	60	81	110	52
75°	28	29	33	35	41	29
85°	8	10	10	9	8	9
90°	0	0	0	0	0	



TEST NUMBER: P1062026

CATALOG NUMBER: S125RDR-H375D840-X4F0-XX-UDD-WVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	422.8	422.8	422.8	422.8	422.8
2.5°	419.9	422.8	420.3	420.3	421.1
5°	410.6	414.8	414.8	417.8	421.1
7.5°	399.2	403.8	406.3	413.1	418.2
10°	386.1	391.1	395.8	405.9	413.5
12.5°	372.1	377.6	384.8	397.9	408.5
15°	356.1	362.8	371.7	388.2	401.3
17.5°	340.0	346.8	357.8	377.2	392.0
20°	322.7	329.9	343.0	364.1	381.8
22.5°	304.1	312.2	326.1	350.2	370.9
25°	285.1	294.0	309.6	335.4	359.0
27.5°	265.3	275.8	292.7	320.2	346.4
30°	245.4	256.0	274.6	304.5	332.4
32.5°	225.6	237.0	257.2	288.9	318.9
35°	205.3	217.1	238.7	272.4	304.5
37.5°	185.4	197.3	221.3	256.4	288.9
40°	164.7	177.0	203.2	239.9	273.7
42.5°	143.6	156.7	185.0	223.0	258.1
45°	124.2	136.4	166.8	206.6	242.0
47.5°	109.8	117.8	148.7	189.7	226.4
50°	100.1	104.3	130.1	173.2	209.9
52.5°	90.4	93.8	112.8	156.3	194.3
55°	81.9	84.5	96.3	141.5	179.5
57.5°	73.5	76.0	83.6	126.7	162.2
60°	65.9	68.0	74.3	111.1	145.7
62.5°	58.7	60.4	67.2	96.3	128.0
65°	52.0	53.2	60.4	80.7	109.8
67.5°	45.2	46.5	53.6	65.9	90.4
70°	39.3	39.7	46.5	53.6	72.7
72.5°	33.4	33.8	39.3	43.5	55.8
75°	27.5	29.1	32.9	35.1	40.6
77.5°	22.4	24.5	26.6	27.5	27.5
80°	17.3	19.9	20.7	20.7	19.9
82.5°	12.7	14.8	15.2	14.4	13.5
85°	8.0	10.1	10.1	9.3	8.4
87.5°	3.8	5.5	5.5	5.1	3.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1062026  
 CATALOG NUMBER: S125RDR-H375D840-X4F0-XX-UDD-WVL-S

**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	10.32	11.81	10.68	12.13	12.44	14.25	15.74	14.61	16.06	16.37
	3H	11.89	13.23	12.27	13.56	13.92	15.67	17.01	16.05	17.34	17.70
	4H	12.50	13.76	12.90	14.11	14.49	16.08	17.34	16.48	17.69	18.07
	6H	13.00	14.16	13.41	14.53	14.92	16.30	17.46	16.71	17.83	18.22
	8H	13.17	14.28	13.60	14.67	15.07	16.36	17.47	16.79	17.86	18.26
	12H	13.30	14.36	13.73	14.74	15.17	16.39	17.45	16.83	17.84	18.27
4H	2H	11.05	12.31	11.46	12.66	13.04	14.37	15.63	14.77	15.98	16.36
	3H	12.84	13.88	13.25	14.28	14.68	15.98	17.03	16.39	17.43	17.83
	4H	13.57	14.51	14.00	14.93	15.37	16.51	17.45	16.94	17.87	18.31
	6H	14.21	15.03	14.66	15.47	15.93	16.85	17.67	17.31	18.12	18.58
	8H	14.44	15.20	14.90	15.65	16.11	16.95	17.72	17.42	18.16	18.63
	12H	14.61	15.29	15.09	15.77	16.24	17.03	17.71	17.51	18.19	18.66
8H	4H	13.97	14.74	14.43	15.18	15.65	16.62	17.38	17.08	17.83	18.29
	6H	14.76	15.39	15.26	15.88	16.36	17.06	17.69	17.55	18.18	18.66
	8H	15.08	15.65	15.60	16.16	16.65	17.22	17.78	17.73	18.29	18.78
	12H	15.36	15.86	15.87	16.35	16.92	17.35	17.85	17.86	18.34	18.91
12H	4H	14.01	14.70	14.50	15.18	15.65	16.62	17.30	17.10	17.78	18.25
	6H	14.84	15.41	15.36	15.92	16.41	17.07	17.64	17.59	18.15	18.64
	8H	15.24	15.74	15.75	16.23	16.80	17.28	17.78	17.79	18.28	18.84