

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: P1061612

Luminaire Tested: S125RDR-S375D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061612  
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-S375D835-X4F0-XX-UDD-WVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE 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: 786.8 lumens  
Efficiency: N/A  
Efficacy: 62.9 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): 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

TEST NUMBER: P1061612

CATALOG NUMBER: S125RDR-S375D835-X4F0-XX-UDD-WVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1061612

CATALOG NUMBER: S125RDR-S375D835-X4F0-XX-UDD-WVL-S

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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°	2890	2890	2890
5°	2817	2846	2889
10°	2679	2747	2870
15°	2520	2630	2839
20°	2347	2495	2777
25°	2150	2335	2708
30°	1937	2166	2624
35°	1713	1991	2541
40°	1470	1813	2442
45°	1201	1612	2340
50°	1065	1383	2232
55°	976	1148	2139
60°	901	1016	1993
65°	841	978	1776
70°	785	928	1451
75°	726	870	1072
80°	682	813	781
85°	632	798	664

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2340 cd/sqm

TEST NUMBER: P1061612

CATALOG NUMBER: S125RDR-S375D835-X4F0-XX-UDD-WVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.8	4.9
10°-20°	104.6	13.3
20°-30°	143.8	18.3
30°-40°	152.4	19.4
40°-50°	133.0	16.9
50°-60°	101.1	12.8
60°-70°	67.7	8.6
70°-80°	34.9	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°	287.3	36.5
0°-40°	439.6	55.9
0°-60°	673.7	85.6
0°-90°	786.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	786.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	408	412	412	415	418	38
15°	354	360	369	385	398	99
25°	283	292	307	333	356	130
35°	204	216	237	270	302	127
45°	123	135	166	205	240	97
55°	81	84	96	140	178	73
65°	52	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	



TEST NUMBER: P1061612

CATALOG NUMBER: S125RDR-S375D835-X4F0-XX-UDD-WVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	419.7	419.7	419.7	419.7	419.7
2.5°	416.8	419.7	417.2	417.2	418.0
5°	407.6	411.8	411.8	414.7	418.0
7.5°	396.2	400.9	403.4	410.1	415.1
10°	383.2	388.3	392.9	402.9	410.5
12.5°	369.4	374.9	382.0	395.0	405.5
15°	353.5	360.2	369.0	385.3	398.3
17.5°	337.5	344.2	355.1	374.4	389.1
20°	320.3	327.5	340.5	361.4	379.0
22.5°	301.9	309.9	323.7	347.6	368.1
25°	283.0	291.8	307.3	332.9	356.4
27.5°	263.3	273.8	290.6	317.8	343.8
30°	243.6	254.1	272.5	302.3	330.0
32.5°	223.9	235.2	255.4	286.8	316.6
35°	203.8	215.5	236.9	270.4	302.3
37.5°	184.1	195.8	219.7	254.5	286.8
40°	163.5	175.7	201.7	238.2	271.7
42.5°	142.6	155.6	183.7	221.4	256.2
45°	123.3	135.4	165.6	205.0	240.3
47.5°	109.0	117.0	147.6	188.3	224.7
50°	99.4	103.6	129.1	171.9	208.4
52.5°	89.7	93.1	112.0	155.1	192.9
55°	81.3	83.9	95.6	140.5	178.2
57.5°	73.0	75.5	83.0	125.8	161.0
60°	65.4	67.5	73.8	110.3	144.7
62.5°	58.3	60.0	66.7	95.6	127.0
65°	51.6	52.8	60.0	80.1	109.0
67.5°	44.9	46.1	53.3	65.4	89.7
70°	39.0	39.4	46.1	53.3	72.1
72.5°	33.1	33.5	39.0	43.2	55.3
75°	27.3	28.9	32.7	34.8	40.3
77.5°	22.2	24.3	26.4	27.3	27.3
80°	17.2	19.7	20.5	20.5	19.7
82.5°	12.6	14.7	15.1	14.3	13.4
85°	8.0	10.1	10.1	9.2	8.4
87.5°	3.8	5.5	5.5	5.0	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)