

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: P1056566

Luminaire Tested: S125R3DR-H375D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056566  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-H375D935-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

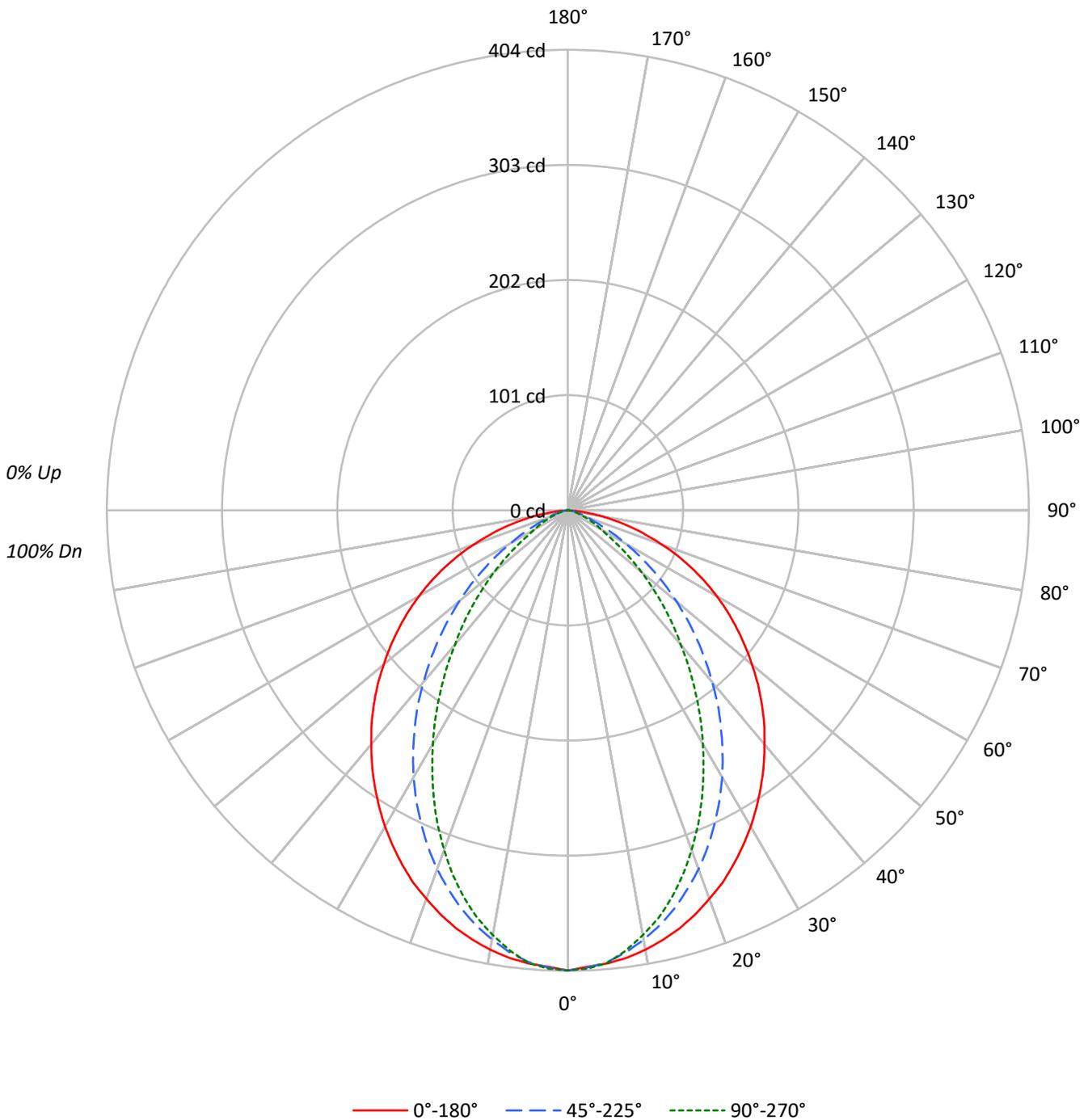
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 729.7 lumens  
Efficiency: N/A  
Efficacy: 62.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' 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: P1056566

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1056566

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

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

	0°	45°	90°
0°	2854	2854	2854
5°	2831	2823	2828
10°	2810	2745	2716
15°	2777	2646	2575
20°	2728	2520	2385
25°	2677	2370	2169
30°	2615	2206	1931
35°	2546	2019	1681
40°	2473	1814	1421
45°	2403	1600	1178
50°	2318	1360	925
55°	2230	1106	673
60°	2131	824	481
65°	2001	544	375
70°	1809	378	263
75°	1573	246	205
80°	1234	183	167
85°	641	154	122

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2403 cd/sqm

TEST NUMBER: P1056566

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.6	5.2
10°-20°	102.2	14.0
20°-30°	141.4	19.4
30°-40°	149.8	20.5
40°-50°	130.7	17.9
50°-60°	93.0	12.7
60°-70°	51.7	7.1
70°-80°	19.9	2.7
80°-90°	3.4	0.5
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°	281.2	38.5
0°-40°	431.0	59.1
0°-60°	654.7	89.7
0°-90°	729.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	729.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	399	402	398	397	398	38
15°	379	376	362	354	352	107
25°	343	332	304	285	278	158
35°	295	275	234	206	195	185
45°	240	212	160	128	118	185
55°	181	145	90	62	55	162
65°	120	78	32	24	22	118
75°	58	22	9	8	8	61
85°	8	2	2	2	2	12
90°	0	0	0	0	0	



TEST NUMBER: P1056566

CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	403.7	403.7	403.7	403.7	403.7
2.5°	400.8	404.9	401.5	401.9	402.3
5°	398.9	401.9	397.8	396.6	398.5
7.5°	395.9	398.1	391.0	388.4	389.5
10°	391.4	392.2	382.4	378.7	378.3
12.5°	385.8	384.7	372.7	366.7	366.4
15°	379.4	376.1	361.5	353.7	351.8
17.5°	371.6	366.4	348.4	338.3	335.3
20°	362.6	355.5	335.0	321.9	317.0
22.5°	353.7	343.9	320.0	303.6	298.3
25°	343.2	331.6	303.9	285.2	278.1
27.5°	332.0	318.1	287.5	265.8	257.2
30°	320.4	304.3	270.3	246.0	236.6
32.5°	308.0	289.7	252.3	225.8	216.1
35°	295.0	274.8	234.0	205.6	194.8
37.5°	281.9	259.4	216.1	185.8	174.6
40°	268.0	243.7	196.6	165.6	154.0
42.5°	254.6	227.7	178.3	146.5	136.1
45°	240.4	211.6	160.0	127.9	117.8
47.5°	225.8	194.8	141.7	110.3	100.2
50°	210.8	178.3	123.7	93.1	84.1
52.5°	195.9	161.9	106.9	76.6	68.8
55°	180.9	145.0	89.7	62.1	54.6
57.5°	166.0	128.6	73.6	48.6	41.9
60°	150.7	111.8	58.3	35.9	34.0
62.5°	135.3	95.3	45.2	29.5	28.0
65°	119.6	78.5	32.5	23.9	22.4
67.5°	103.9	63.2	23.6	18.3	17.2
70°	87.5	48.2	18.3	13.8	12.7
72.5°	71.8	34.8	13.1	10.1	9.7
75°	57.6	22.4	9.0	7.5	7.5
77.5°	43.4	13.5	6.4	5.6	5.6
80°	30.3	7.9	4.5	4.1	4.1
82.5°	18.3	4.1	3.0	2.6	2.6
85°	7.9	2.2	1.9	1.5	1.5
87.5°	1.5	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1056566  
 CATALOG NUMBER: S125R3DR-H375D935-X4F0-XX-UDD-FLL-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	14.81	16.25	15.17	16.56	16.88	7.44	8.89	7.81	9.20	9.52
	3H	16.36	17.65	16.74	17.98	18.34	8.01	9.29	8.39	9.62	9.99
	4H	16.89	18.09	17.29	18.44	18.82	8.13	9.33	8.53	9.68	10.06
	6H	17.22	18.33	17.64	18.70	19.09	8.20	9.30	8.61	9.67	10.06
	8H	17.31	18.36	17.73	18.75	19.15	8.20	9.25	8.63	9.64	10.04
	12H	17.33	18.34	17.76	18.72	19.15	8.19	9.20	8.62	9.58	10.01
4H	2H	14.70	15.90	15.10	16.25	16.63	8.01	9.21	8.41	9.56	9.94
	3H	16.37	17.36	16.78	17.76	18.16	8.68	9.67	9.09	10.07	10.47
	4H	16.92	17.80	17.35	18.22	18.66	8.84	9.72	9.27	10.14	10.58
	6H	17.31	18.08	17.77	18.52	18.98	8.95	9.71	9.41	10.16	10.62
	8H	17.42	18.13	17.88	18.57	19.04	8.96	9.67	9.43	10.12	10.59
	12H	17.46	18.10	17.95	18.58	19.05	8.96	9.59	9.45	10.08	10.55
8H	4H	16.82	17.53	17.29	17.98	18.45	9.11	9.82	9.57	10.27	10.74
	6H	17.21	17.79	17.71	18.29	18.77	9.24	9.83	9.74	10.32	10.80
	8H	17.32	17.84	17.83	18.35	18.84	9.27	9.79	9.79	10.31	10.80
	12H	17.38	17.84	17.89	18.34	18.91	9.29	9.75	9.80	10.25	10.82
12H	4H	16.78	17.42	17.27	17.90	18.37	9.12	9.76	9.61	10.24	10.71
	6H	17.16	17.68	17.67	18.19	18.68	9.25	9.78	9.77	10.29	10.78
	8H	17.28	17.75	17.80	18.24	18.81	9.31	9.77	9.82	10.27	10.84