

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: P1056462

Luminaire Tested: S125R3DR-S610D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S610D940-X4F0-XX-UDD-FLL-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

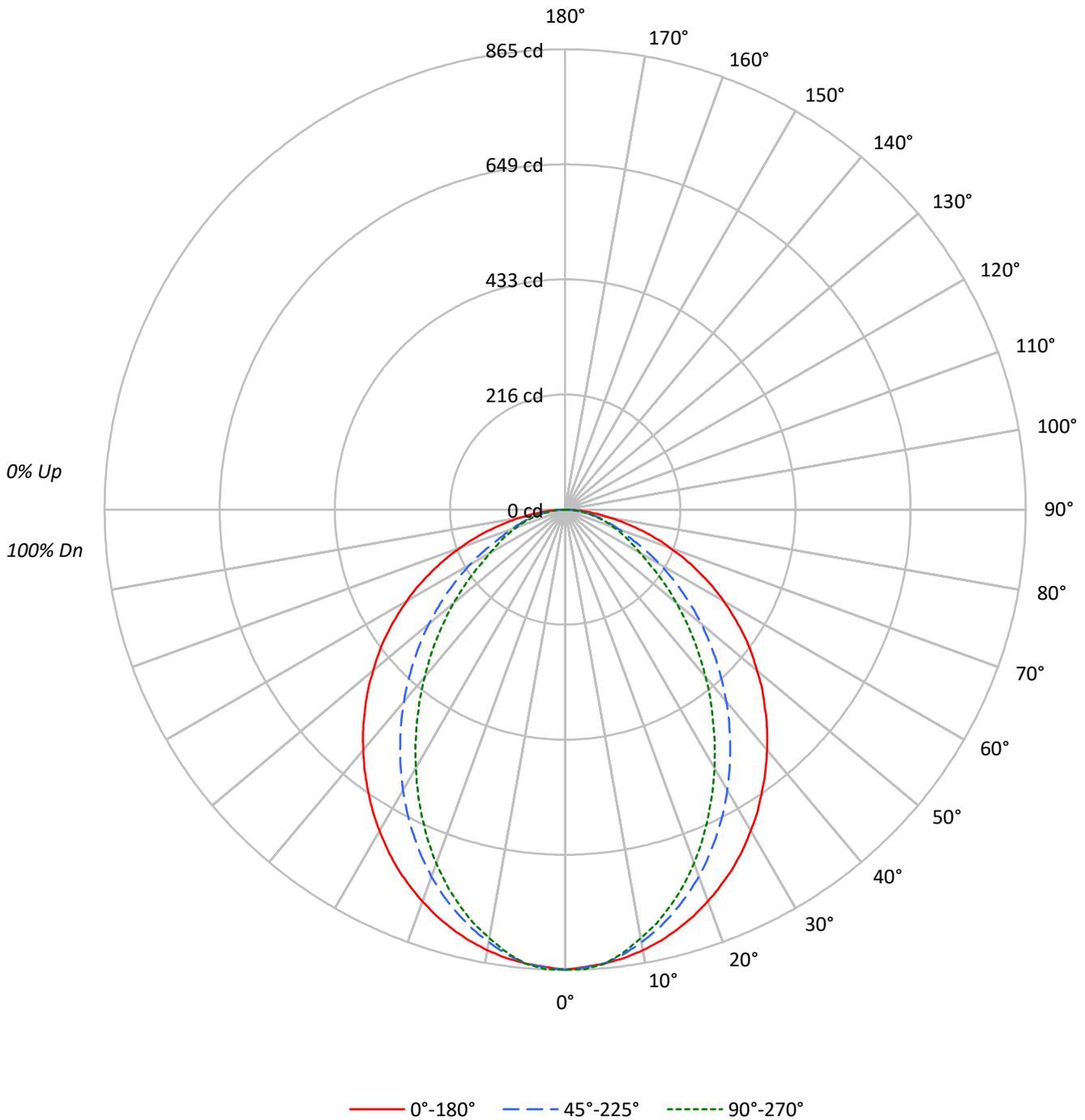
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1833.0 lumens  
Efficiency: N/A  
Efficacy: 96.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.1  
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: P1056462

CATALOG NUMBER: S125R3DR-S610D940-X4F0-XX-UDD-FLL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1056462

CATALOG NUMBER: S125R3DR-S610D940-X4F0-XX-UDD-FLL-W

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

RF	20									20									20									20									
RC	80									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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86			86																
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73			73																
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63			63																
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55			55																
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48			48																
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43			43																
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38			38																
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34			34																
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31			31																
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28			28																

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

	0°	45°	90°
0°	6114	6114	6114
5°	6077	6073	6077
10°	6037	5926	5870
15°	5976	5745	5627
20°	5896	5523	5324
25°	5806	5259	4962
30°	5693	4973	4579
35°	5568	4663	4179
40°	5444	4344	3785
45°	5312	4011	3393
50°	5170	3669	3002
55°	5040	3293	2612
60°	4862	2896	2295
65°	4622	2456	2133
70°	4338	2197	1997
75°	3922	2024	1882
80°	3407	1836	1755
85°	2660	1622	1622

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5312 cd/sqm



TEST NUMBER: P1056462

CATALOG NUMBER: S125R3DR-S610D940-X4F0-XX-UDD-FLL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.9	4.4
10°-20°	222.2	12.1
20°-30°	313.8	17.1
30°-40°	345.5	18.8
40°-50°	322.3	17.6
50°-60°	257.3	14.0
60°-70°	173.1	9.4
70°-80°	92.2	5.0
80°-90°	25.6	1.4
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°	616.9	33.7
0°-40°	962.4	52.5
0°-60°	1542.0	84.1
0°-90°	1833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1833.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	865	865	865	865	865	
5°	856	864	856	853	856	81
15°	816	812	785	771	769	230
25°	744	722	674	645	636	343
35°	645	607	540	498	484	404
45°	531	481	401	352	339	410
55°	409	347	267	225	212	365
65°	276	216	147	130	128	274
75°	144	95	74	70	69	153
85°	33	22	20	21	20	39
90°	0	0	0	0	0	



TEST NUMBER: P1056462

CATALOG NUMBER: S125R3DR-S610D940-X4F0-XX-UDD-FLL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	864.8	864.8	864.8	864.8	864.8
2.5°	860.3	867.4	861.6	862.9	864.2
5°	856.4	863.5	855.8	853.2	856.4
7.5°	850.0	855.8	842.9	837.1	839.7
10°	841.0	844.9	825.5	817.8	817.8
12.5°	830.0	830.0	806.9	795.9	795.9
15°	816.5	812.0	785.0	771.4	768.9
17.5°	801.1	792.7	760.5	743.1	739.9
20°	783.7	770.2	734.1	711.6	707.7
22.5°	764.4	747.0	705.1	677.4	672.9
25°	744.4	721.9	674.2	644.6	636.2
27.5°	721.9	694.8	642.7	609.2	598.9
30°	697.4	666.5	609.2	571.8	560.9
32.5°	672.3	637.5	575.0	535.1	522.9
35°	645.2	607.2	540.3	497.8	484.2
37.5°	618.2	577.0	506.1	461.7	447.5
40°	589.9	544.8	470.7	425.0	410.2
42.5°	561.5	513.2	435.9	389.6	374.1
45°	531.3	481.0	401.2	352.2	339.4
47.5°	502.3	448.2	367.0	319.4	305.2
50°	470.1	414.1	333.6	285.9	273.0
52.5°	440.5	380.6	300.1	255.6	242.1
55°	408.9	347.1	267.2	224.7	211.9
57.5°	376.1	313.6	235.7	195.8	183.5
60°	343.9	280.1	204.8	168.1	162.3
62.5°	311.0	248.6	175.8	147.5	143.6
65°	276.3	215.7	146.8	130.1	127.5
67.5°	243.4	184.2	123.6	114.0	111.4
70°	209.9	152.6	106.3	97.9	96.6
72.5°	177.1	122.3	89.5	83.7	82.4
75°	143.6	95.3	74.1	69.5	68.9
77.5°	112.7	71.5	58.6	56.7	55.4
80°	83.7	53.4	45.1	43.8	43.1
82.5°	57.3	36.7	32.2	32.2	30.9
85°	32.8	22.5	20.0	20.6	20.0
87.5°	12.2	9.7	9.0	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)