

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: P1056446

Luminaire Tested: S125R3DR-S610D840-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056446  
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-S610D840-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

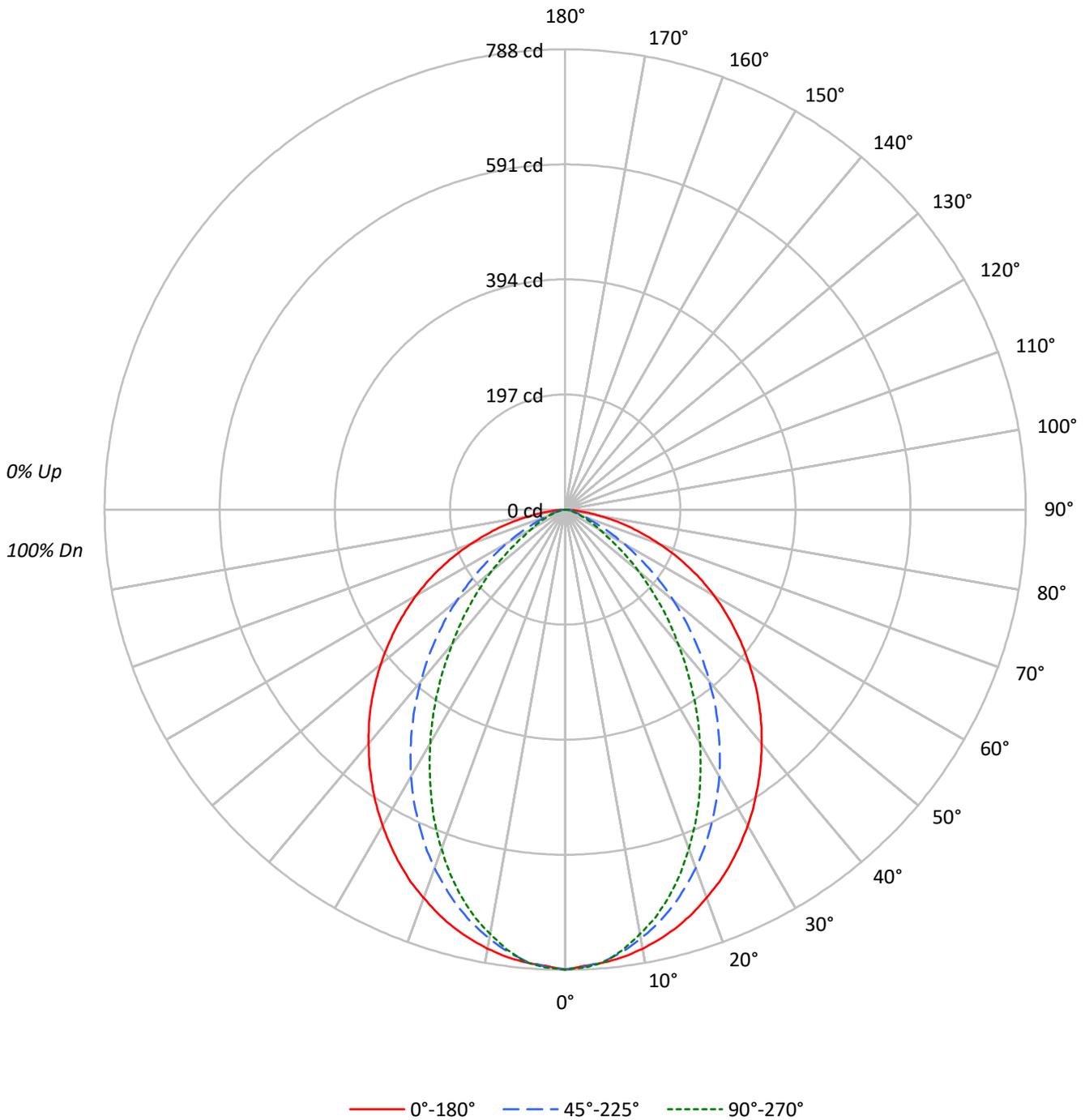
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1423.5 lumens  
Efficiency: N/A  
Efficacy: 74.5 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): 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: P1056446

CATALOG NUMBER: S125R3DR-S610D840-X4F0-XX-UDD-FLL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1056446

CATALOG NUMBER: S125R3DR-S610D840-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°	5568	5568	5568
5°	5522	5506	5517
10°	5481	5355	5298
15°	5417	5161	5022
20°	5322	4916	4652
25°	5222	4625	4232
30°	5102	4304	3768
35°	4966	3940	3279
40°	4826	3540	2773
45°	4688	3120	2296
50°	4523	2655	1805
55°	4351	2157	1313
60°	4155	1609	939
65°	3904	1061	733
70°	3526	738	513
75°	3067	478	399
80°	2406	358	326
85°	1241	292	235

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4688 cd/sqm



TEST NUMBER: P1056446

CATALOG NUMBER: S125R3DR-S610D840-X4F0-XX-UDD-FLL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.4	5.2
10°-20°	199.4	14.0
20°-30°	275.8	19.4
30°-40°	292.2	20.5
40°-50°	255.0	17.9
50°-60°	181.4	12.7
60°-70°	100.9	7.1
70°-80°	38.8	2.7
80°-90°	6.7	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°	548.6	38.5
0°-40°	840.8	59.1
0°-60°	1277.2	89.7
0°-90°	1423.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1423.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	778	784	776	774	777	74
15°	740	734	705	690	686	208
25°	670	647	593	556	543	308
35°	575	536	456	401	380	360
45°	469	413	312	249	230	361
55°	353	283	175	121	106	316
65°	233	153	63	47	44	231
75°	112	44	18	15	15	119
85°	15	4	4	3	3	23
90°	0	0	0	0	0	



TEST NUMBER: P1056446

CATALOG NUMBER: S125R3DR-S610D840-X4F0-XX-UDD-FLL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	787.6	787.6	787.6	787.6	787.6
2.5°	781.8	789.8	783.2	784.0	784.7
5°	778.1	784.0	775.9	773.8	777.4
7.5°	772.3	776.7	762.8	757.7	759.9
10°	763.5	765.0	746.0	738.7	738.0
12.5°	752.6	750.4	727.1	715.4	714.7
15°	740.2	733.6	705.2	689.9	686.2
17.5°	724.9	714.7	679.7	660.0	654.2
20°	707.4	693.5	653.4	627.9	618.4
22.5°	689.9	670.9	624.3	592.2	582.0
25°	669.5	646.9	592.9	556.4	542.6
27.5°	647.6	620.6	560.8	518.5	501.7
30°	625.0	593.6	527.3	479.9	461.6
32.5°	600.9	565.2	492.3	440.5	421.5
35°	575.4	536.0	456.5	401.1	379.9
37.5°	549.9	506.1	421.5	362.4	340.6
40°	522.9	475.5	383.6	323.1	300.5
42.5°	496.6	444.1	347.9	285.9	265.5
45°	468.9	412.8	312.1	249.4	229.7
47.5°	440.5	379.9	276.4	215.1	195.4
50°	411.3	347.9	241.4	181.6	164.1
52.5°	382.1	315.8	208.6	149.5	134.2
55°	353.0	283.0	175.0	121.1	106.5
57.5°	323.8	250.9	143.7	94.8	81.7
60°	293.9	218.1	113.8	70.0	66.4
62.5°	264.0	186.0	88.2	57.6	54.7
65°	233.4	153.1	63.4	46.7	43.8
67.5°	202.7	123.2	45.9	35.7	33.5
70°	170.6	94.1	35.7	27.0	24.8
72.5°	140.0	67.8	25.5	19.7	19.0
75°	112.3	43.8	17.5	14.6	14.6
77.5°	84.6	26.3	12.4	10.9	10.9
80°	59.1	15.3	8.8	8.0	8.0
82.5°	35.7	8.0	5.8	5.1	5.1
85°	15.3	4.4	3.6	2.9	2.9
87.5°	2.9	1.5	1.5	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)