

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: P1056461

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056461
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-S610D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

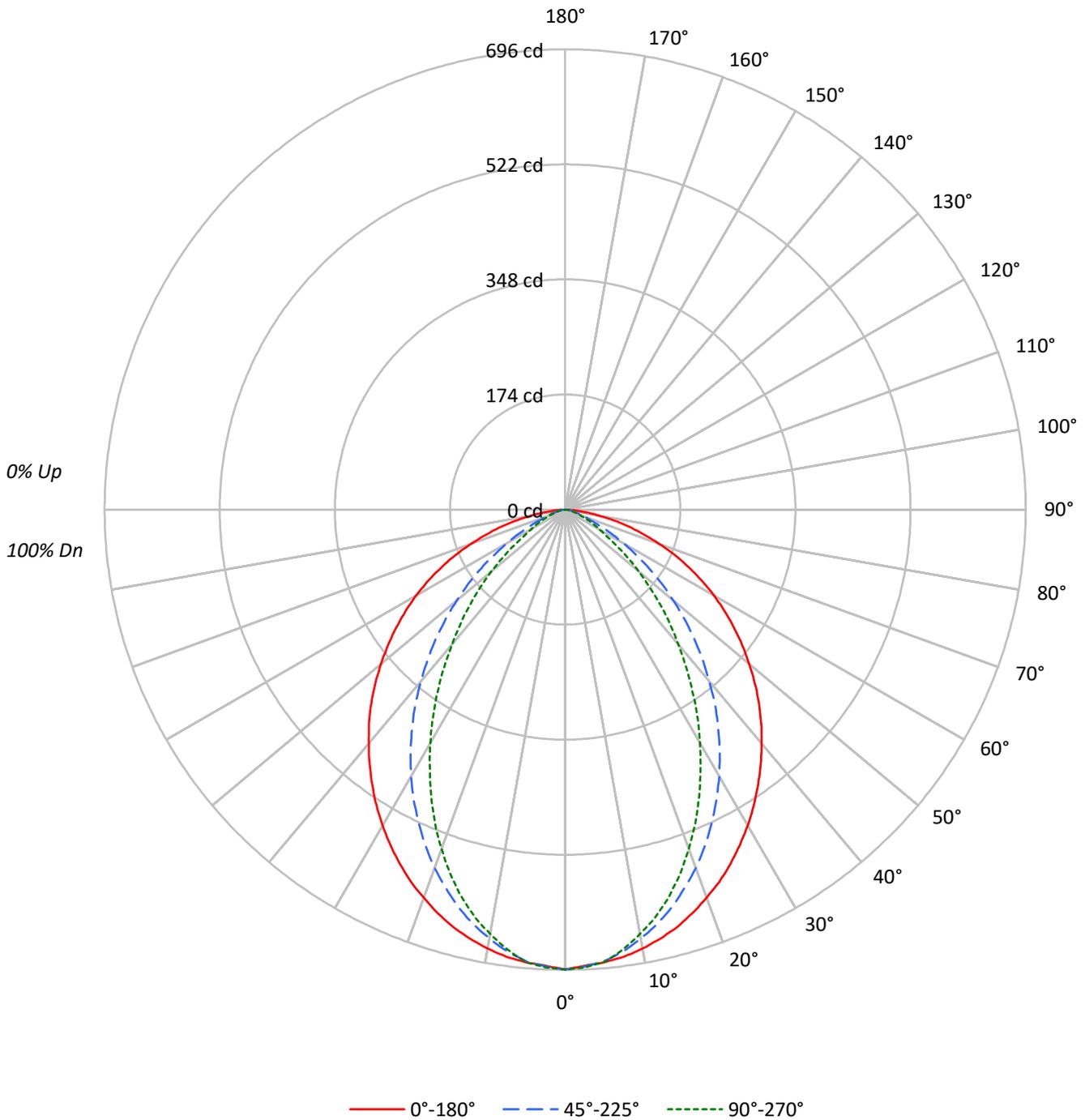
Lumens per Lamp: N/A
Luminaire Lumens: 1257.0 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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°	4917	4917	4917
5°	4876	4862	4871
10°	4840	4729	4678
15°	4784	4557	4434
20°	4699	4341	4108
25°	4611	4083	3737
30°	4505	3801	3327
35°	4385	3479	2895
40°	4261	3126	2448
45°	4140	2755	2028
50°	3994	2344	1594
55°	3842	1904	1159
60°	3669	1421	829
65°	3448	937	646
70°	3115	653	453
75°	2710	423	352
80°	2125	313	289
85°	1095	260	211

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4140 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	5.2
10°-20°	176.1	14.0
20°-30°	243.5	19.4
30°-40°	258.0	20.5
40°-50°	225.2	17.9
50°-60°	160.2	12.7
60°-70°	89.1	7.1
70°-80°	34.2	2.7
80°-90°	5.9	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°	484.4	38.5
0°-40°	742.4	59.1
0°-60°	1127.8	89.7
0°-90°	1257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	687	692	685	683	686	65
15°	654	648	623	609	606	184
25°	591	571	524	491	479	272
35°	508	473	403	354	336	318
45°	414	364	276	220	203	319
55°	312	250	154	107	94	279
65°	206	135	56	41	39	204
75°	99	39	16	13	13	105
85°	14	4	3	3	3	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.5	695.5	695.5	695.5	695.5
2.5°	690.3	697.4	691.6	692.2	692.9
5°	687.1	692.2	685.2	683.2	686.4
7.5°	681.9	685.8	673.6	669.1	671.0
10°	674.2	675.5	658.8	652.3	651.7
12.5°	664.5	662.6	642.0	631.7	631.1
15°	653.6	647.8	622.7	609.2	605.9
17.5°	640.1	631.1	600.2	582.8	577.6
20°	624.6	612.4	577.0	554.4	546.1
22.5°	609.2	592.4	551.2	522.9	513.9
25°	591.1	571.2	523.5	491.3	479.1
27.5°	571.8	548.0	495.2	457.8	443.0
30°	551.9	524.2	465.6	423.7	407.6
32.5°	530.6	499.1	434.7	388.9	372.2
35°	508.1	473.3	403.1	354.2	335.5
37.5°	485.5	446.9	372.2	320.0	300.7
40°	461.7	419.9	338.7	285.3	265.3
42.5°	438.5	392.2	307.2	252.4	234.4
45°	414.1	364.5	275.6	220.2	202.8
47.5°	388.9	335.5	244.1	190.0	172.6
50°	363.2	307.2	213.1	160.3	144.9
52.5°	337.4	278.8	184.2	132.0	118.5
55°	311.7	249.8	154.5	106.9	94.0
57.5°	285.9	221.5	126.9	83.7	72.1
60°	259.5	192.5	100.5	61.8	58.6
62.5°	233.1	164.2	77.9	50.9	48.3
65°	206.1	135.2	56.0	41.2	38.6
67.5°	179.0	108.8	40.6	31.6	29.6
70°	150.7	83.1	31.6	23.8	21.9
72.5°	123.6	59.9	22.5	17.4	16.7
75°	99.2	38.6	15.5	12.9	12.9
77.5°	74.7	23.2	10.9	9.7	9.7
80°	52.2	13.5	7.7	7.1	7.1
82.5°	31.6	7.1	5.2	4.5	4.5
85°	13.5	3.9	3.2	2.6	2.6
87.5°	2.6	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)