

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: P1056449

Luminaire Tested: S125R3DR-S610D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056449
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-S610D850-X4F0-XX-UDD-FLL-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

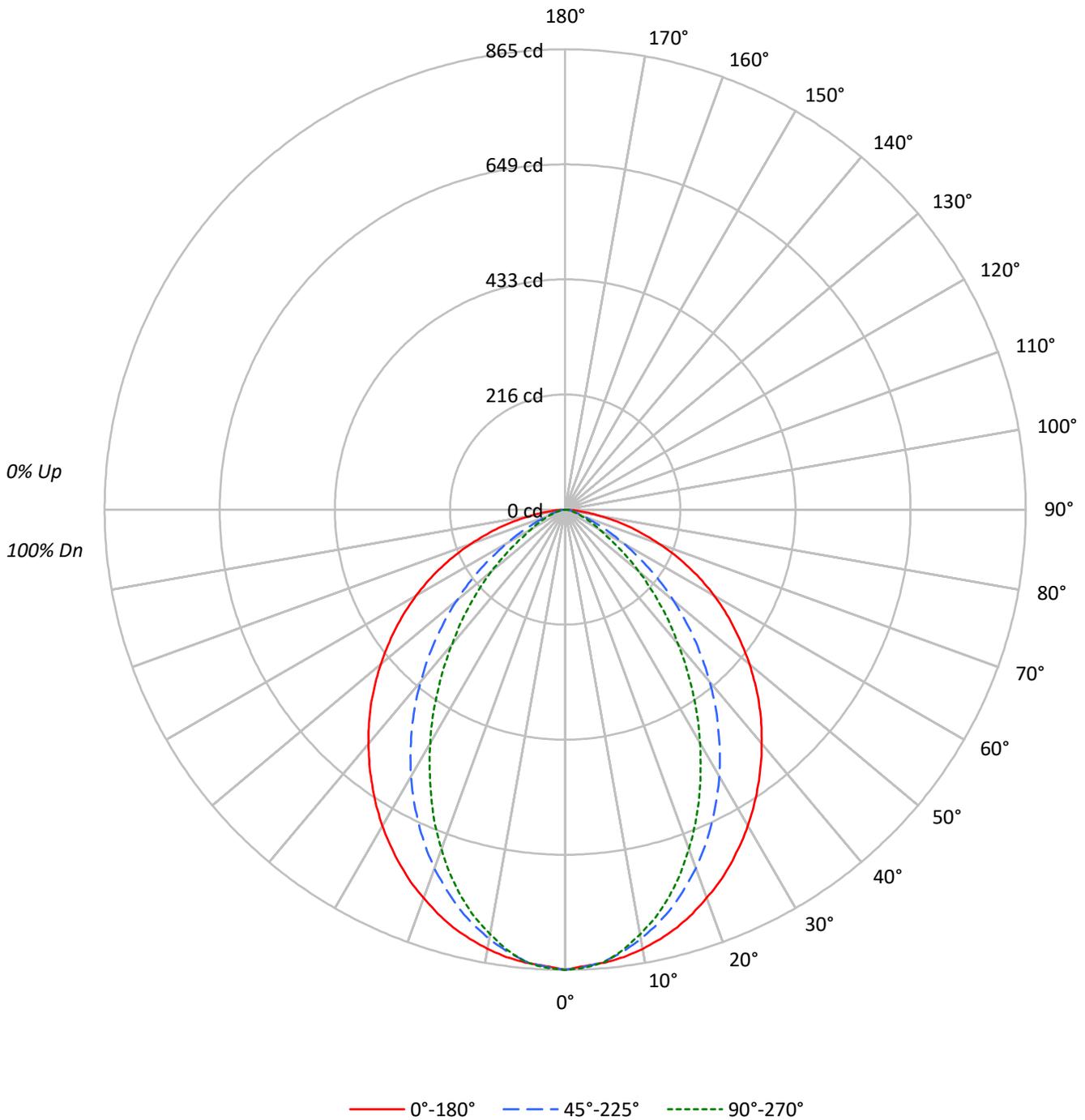
Lumens per Lamp: N/A
Luminaire Lumens: 1563.3 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056449

CATALOG NUMBER: S125R3DR-S610D850-X4F0-XX-UDD-FLL-S

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	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°	6114	6114	6114
5°	6064	6047	6058
10°	6019	5881	5818
15°	5949	5668	5515
20°	5844	5399	5109
25°	5735	5079	4647
30°	5602	4726	4138
35°	5453	4326	3600
40°	5299	3888	3045
45°	5149	3427	2522
50°	4968	2916	1982
55°	4777	2369	1441
60°	4563	1766	1031
65°	4287	1166	805
70°	3873	810	562
75°	3368	524	437
80°	2642	391	358
85°	1363	324	260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5149 cd/sqm



TEST NUMBER: P1056449

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.6	5.2
10°-20°	219.0	14.0
20°-30°	302.9	19.4
30°-40°	320.9	20.5
40°-50°	280.1	17.9
50°-60°	199.2	12.7
60°-70°	110.8	7.1
70°-80°	42.6	2.7
80°-90°	7.4	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°	602.4	38.5
0°-40°	923.3	59.1
0°-60°	1402.6	89.7
0°-90°	1563.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1563.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	865	865	865	865	865	
5°	854	861	852	850	854	81
15°	813	806	774	758	754	229
25°	735	710	651	611	596	338
35°	632	589	501	440	417	395
45°	515	453	343	274	252	397
55°	388	311	192	133	117	347
65°	256	168	70	51	48	253
75°	123	48	19	16	16	131
85°	17	5	4	3	3	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	864.9	864.9	864.9	864.9	864.9
2.5°	858.5	867.3	860.1	860.9	861.7
5°	854.5	860.9	852.1	849.7	853.7
7.5°	848.1	852.9	837.7	832.1	834.5
10°	838.5	840.1	819.3	811.3	810.5
12.5°	826.5	824.1	798.5	785.6	784.8
15°	812.9	805.7	774.4	757.6	753.6
17.5°	796.1	784.8	746.4	724.8	718.4
20°	776.8	761.6	717.6	689.5	679.1
22.5°	757.6	736.8	685.5	650.3	639.1
25°	735.2	710.4	651.1	611.1	595.8
27.5°	711.2	681.5	615.9	569.4	551.0
30°	686.3	651.9	579.0	527.0	506.9
32.5°	659.9	620.7	540.6	483.7	462.9
35°	631.9	588.6	501.3	440.5	417.2
37.5°	603.8	555.8	462.9	398.0	374.0
40°	574.2	522.2	421.3	354.8	330.0
42.5°	545.4	487.7	382.0	313.9	291.5
45°	515.0	453.3	342.8	273.9	252.3
47.5°	483.7	417.2	303.5	236.3	214.6
50°	451.7	382.0	265.1	199.4	180.2
52.5°	419.6	346.8	229.0	164.2	147.4
55°	387.6	310.7	192.2	132.9	116.9
57.5°	355.6	275.5	157.8	104.1	89.7
60°	322.7	239.5	124.9	76.9	72.9
62.5°	289.9	204.2	96.9	63.3	60.1
65°	256.3	168.2	69.7	51.3	48.1
67.5°	222.6	135.3	50.5	39.2	36.8
70°	187.4	103.3	39.2	29.6	27.2
72.5°	153.8	74.5	28.0	21.6	20.8
75°	123.3	48.1	19.2	16.0	16.0
77.5°	92.9	28.8	13.6	12.0	12.0
80°	64.9	16.8	9.6	8.8	8.8
82.5°	39.2	8.8	6.4	5.6	5.6
85°	16.8	4.8	4.0	3.2	3.2
87.5°	3.2	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)