

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: P1056448

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)
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-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

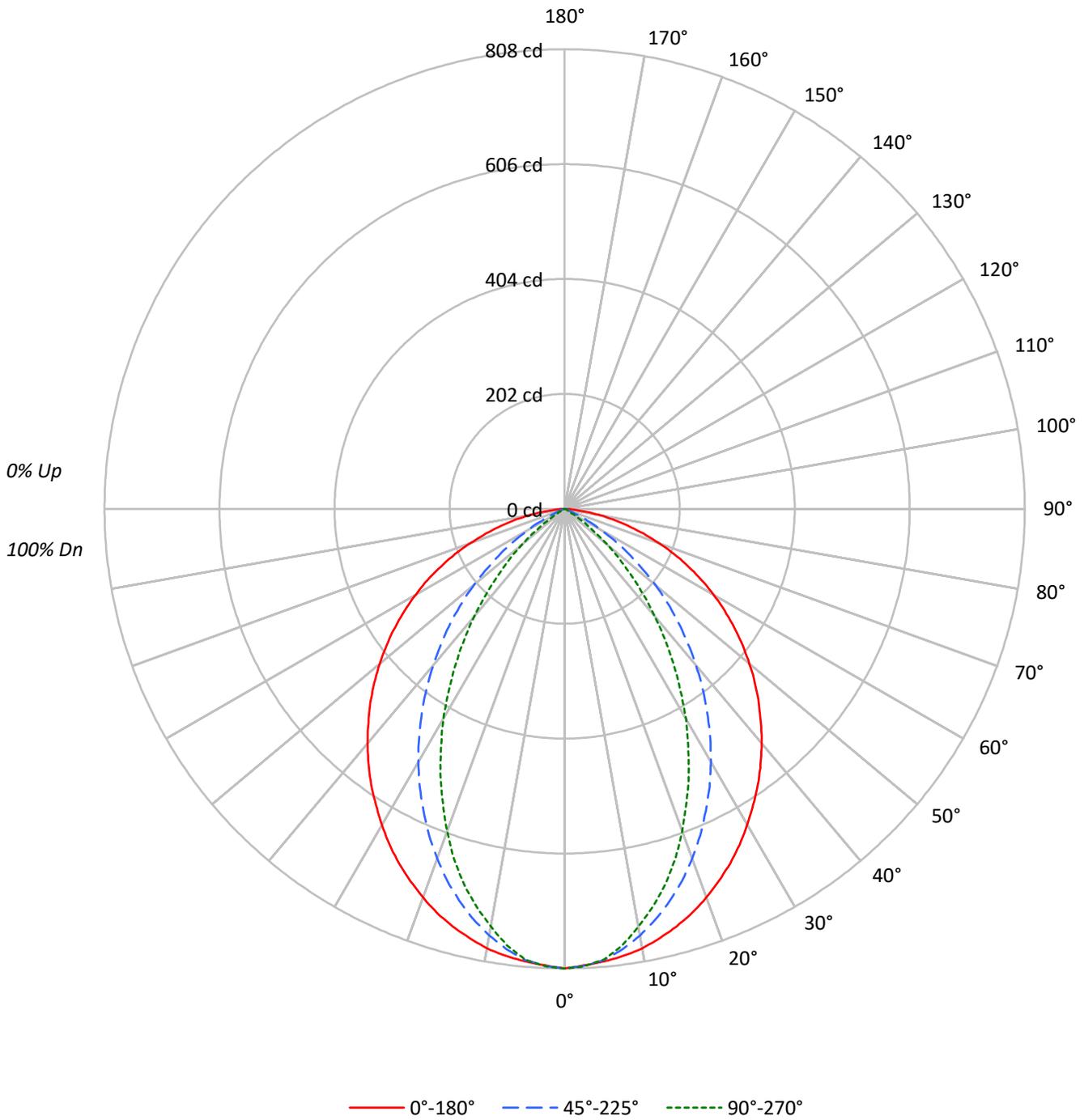
Lumens per Lamp: N/A
Luminaire Lumens: 1309.7 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1056448

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

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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5713	5713	5713
5°	5666	5649	5644
10°	5634	5467	5352
15°	5562	5223	4999
20°	5471	4922	4536
25°	5366	4572	4023
30°	5237	4191	3478
35°	5107	3767	2876
40°	4967	3311	2277
45°	4820	2826	1650
50°	4660	2281	1066
55°	4481	1668	473
60°	4268	1031	136
65°	4006	375	80
70°	3625	132	33
75°	3149	44	22
80°	2414	33	0
85°	1103	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4820 cd/sqm



TEST NUMBER: P1056448

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	5.7
10°-20°	201.5	15.4
20°-30°	272.6	20.8
30°-40°	280.1	21.4
40°-50°	232.0	17.7
50°-60°	149.0	11.4
60°-70°	72.0	5.5
70°-80°	24.3	1.9
80°-90°	3.1	0.2
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°	549.2	41.9
0°-40°	829.3	63.3
0°-60°	1210.3	92.4
0°-90°	1309.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1309.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	798	805	796	791	795	76
15°	760	750	714	689	683	214
25°	688	654	586	533	516	317
35°	592	535	436	360	333	370
45°	482	403	283	195	165	372
55°	364	267	135	59	38	325
65°	240	132	22	6	5	237
75°	115	25	2	1	1	122
85°	14	0	0	0	0	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.1	808.1	808.1	808.1	808.1
2.5°	803.3	809.7	804.1	803.3	804.9
5°	798.5	804.9	796.1	791.2	795.3
7.5°	792.8	796.1	780.8	772.8	774.4
10°	784.8	784.0	761.6	748.0	745.6
12.5°	772.8	768.8	739.2	720.0	716.0
15°	760.0	750.4	713.6	688.7	683.1
17.5°	744.8	729.6	685.5	653.5	645.5
20°	727.2	706.4	654.3	615.1	603.0
22.5°	708.0	681.5	621.5	575.0	559.0
25°	687.9	654.3	586.2	533.4	515.8
27.5°	665.5	626.3	551.0	490.9	469.3
30°	641.5	596.6	513.4	447.7	426.1
32.5°	616.7	567.0	475.7	404.4	378.0
35°	591.8	535.0	436.5	360.4	333.2
37.5°	565.4	502.9	398.0	318.7	289.1
40°	538.2	470.1	358.8	275.5	246.7
42.5°	510.1	436.5	319.5	234.7	205.0
45°	482.1	402.8	282.7	195.4	165.0
47.5°	453.3	368.4	244.3	157.0	130.5
50°	423.7	334.8	207.4	122.5	96.9
52.5°	394.0	300.3	169.8	88.9	65.7
55°	363.6	266.7	135.3	59.3	38.4
57.5°	333.2	232.2	103.3	32.8	14.4
60°	301.9	199.4	72.9	11.2	9.6
62.5°	271.5	164.2	45.6	8.8	7.2
65°	239.5	132.1	22.4	6.4	4.8
67.5°	208.2	101.7	9.6	4.0	2.4
70°	175.4	73.7	6.4	2.4	1.6
72.5°	145.0	47.3	4.0	1.6	0.8
75°	115.3	24.8	1.6	0.8	0.8
77.5°	86.5	10.4	0.8	0.8	0.8
80°	59.3	4.8	0.8	0.8	0.0
82.5°	35.2	1.6	0.8	0.8	0.0
85°	13.6	0.0	0.0	0.0	0.0
87.5°	0.8	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)