

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: P1056439

Luminaire Tested: S125R3DR-S610D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056439
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-S610D830-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

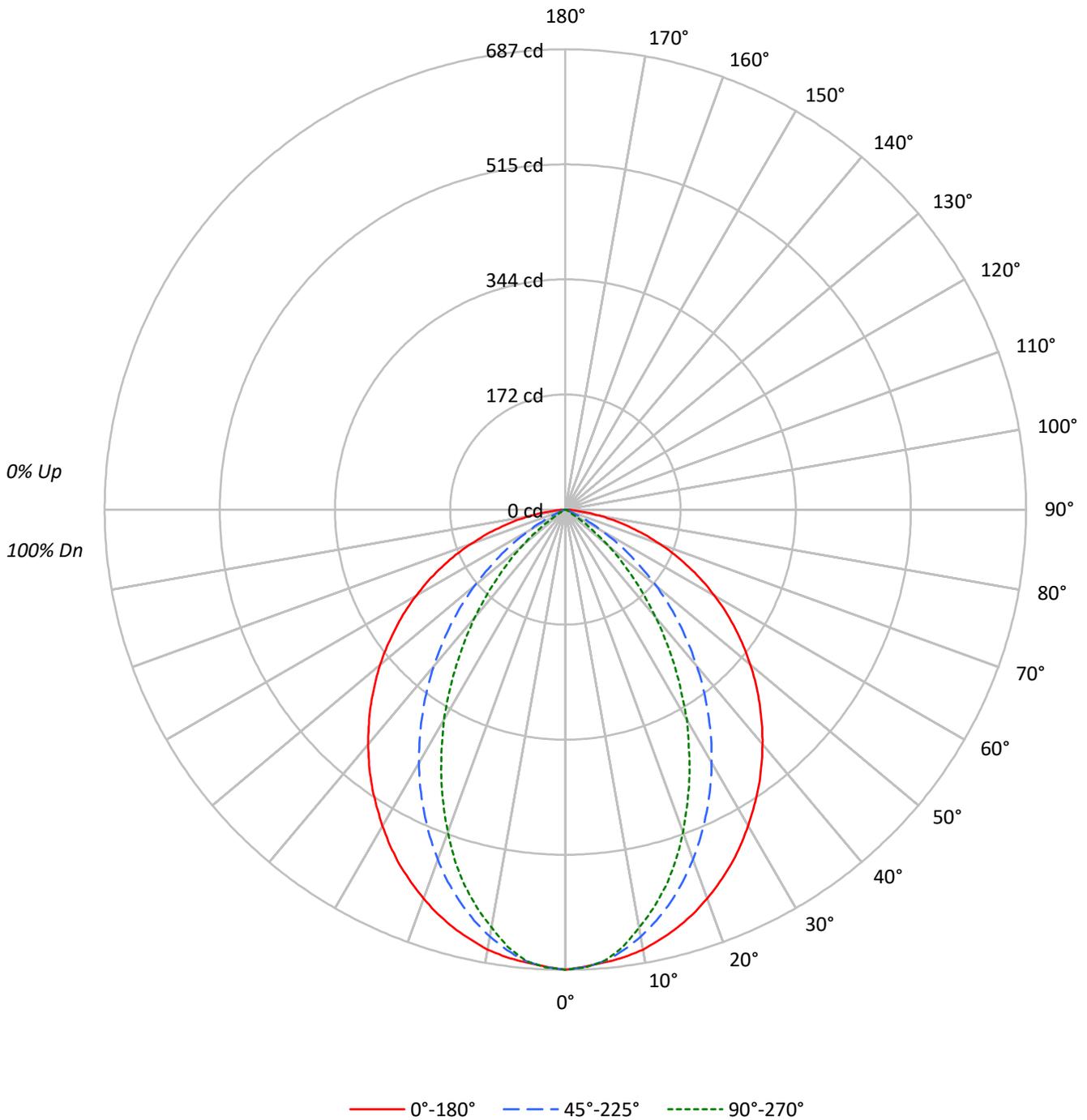
Lumens per Lamp: N/A
Luminaire Lumens: 1113.2 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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°	4855	4855	4855
5°	4816	4801	4796
10°	4788	4647	4549
15°	4727	4439	4249
20°	4649	4184	3856
25°	4561	3886	3419
30°	4450	3562	2956
35°	4341	3202	2444
40°	4221	2814	1934
45°	4097	2402	1402
50°	3960	1939	906
55°	3808	1417	403
60°	3628	875	116
65°	3404	319	69
70°	3082	112	29
75°	2677	38	19
80°	2052	28	0
85°	941	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4097 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	5.7
10°-20°	171.3	15.4
20°-30°	231.7	20.8
30°-40°	238.0	21.4
40°-50°	197.2	17.7
50°-60°	126.6	11.4
60°-70°	61.2	5.5
70°-80°	20.7	1.9
80°-90°	2.7	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°	466.8	41.9
0°-40°	704.8	63.3
0°-60°	1028.7	92.4
0°-90°	1113.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1113.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	679	684	677	672	676	64
15°	646	638	606	585	581	182
25°	585	556	498	453	438	269
35°	503	455	371	306	283	314
45°	410	342	240	166	140	316
55°	309	227	115	50	33	276
65°	204	112	19	5	4	201
75°	98	21	1	1	1	104
85°	12	0	0	0	0	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.8	686.8	686.8	686.8	686.8
2.5°	682.7	688.1	683.4	682.7	684.1
5°	678.6	684.1	676.6	672.5	675.9
7.5°	673.8	676.6	663.6	656.8	658.2
10°	667.0	666.4	647.3	635.7	633.7
12.5°	656.8	653.4	628.2	611.9	608.5
15°	645.9	637.8	606.5	585.4	580.6
17.5°	633.0	620.1	582.6	555.4	548.6
20°	618.0	600.3	556.1	522.7	512.5
22.5°	601.7	579.2	528.2	488.7	475.1
25°	584.7	556.1	498.2	453.3	438.3
27.5°	565.6	532.3	468.3	417.2	398.9
30°	545.2	507.1	436.3	380.5	362.1
32.5°	524.1	481.9	404.3	343.7	321.3
35°	503.0	454.7	371.0	306.3	283.2
37.5°	480.5	427.4	338.3	270.9	245.7
40°	457.4	399.5	304.9	234.1	209.6
42.5°	433.6	371.0	271.6	199.4	174.2
45°	409.8	342.4	240.3	166.1	140.2
47.5°	385.2	313.1	207.6	133.4	110.9
50°	360.1	284.5	176.3	104.1	82.4
52.5°	334.9	255.2	144.3	75.6	55.8
55°	309.0	226.7	115.0	50.4	32.7
57.5°	283.2	197.4	87.8	27.9	12.3
60°	256.6	169.5	61.9	9.5	8.2
62.5°	230.7	139.5	38.8	7.5	6.1
65°	203.5	112.3	19.1	5.4	4.1
67.5°	177.0	86.4	8.2	3.4	2.0
70°	149.1	62.6	5.4	2.0	1.4
72.5°	123.2	40.2	3.4	1.4	0.7
75°	98.0	21.1	1.4	0.7	0.7
77.5°	73.5	8.8	0.7	0.7	0.7
80°	50.4	4.1	0.7	0.7	0.0
82.5°	29.9	1.4	0.7	0.7	0.0
85°	11.6	0.0	0.0	0.0	0.0
87.5°	0.7	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)