

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: P1056450

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
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-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

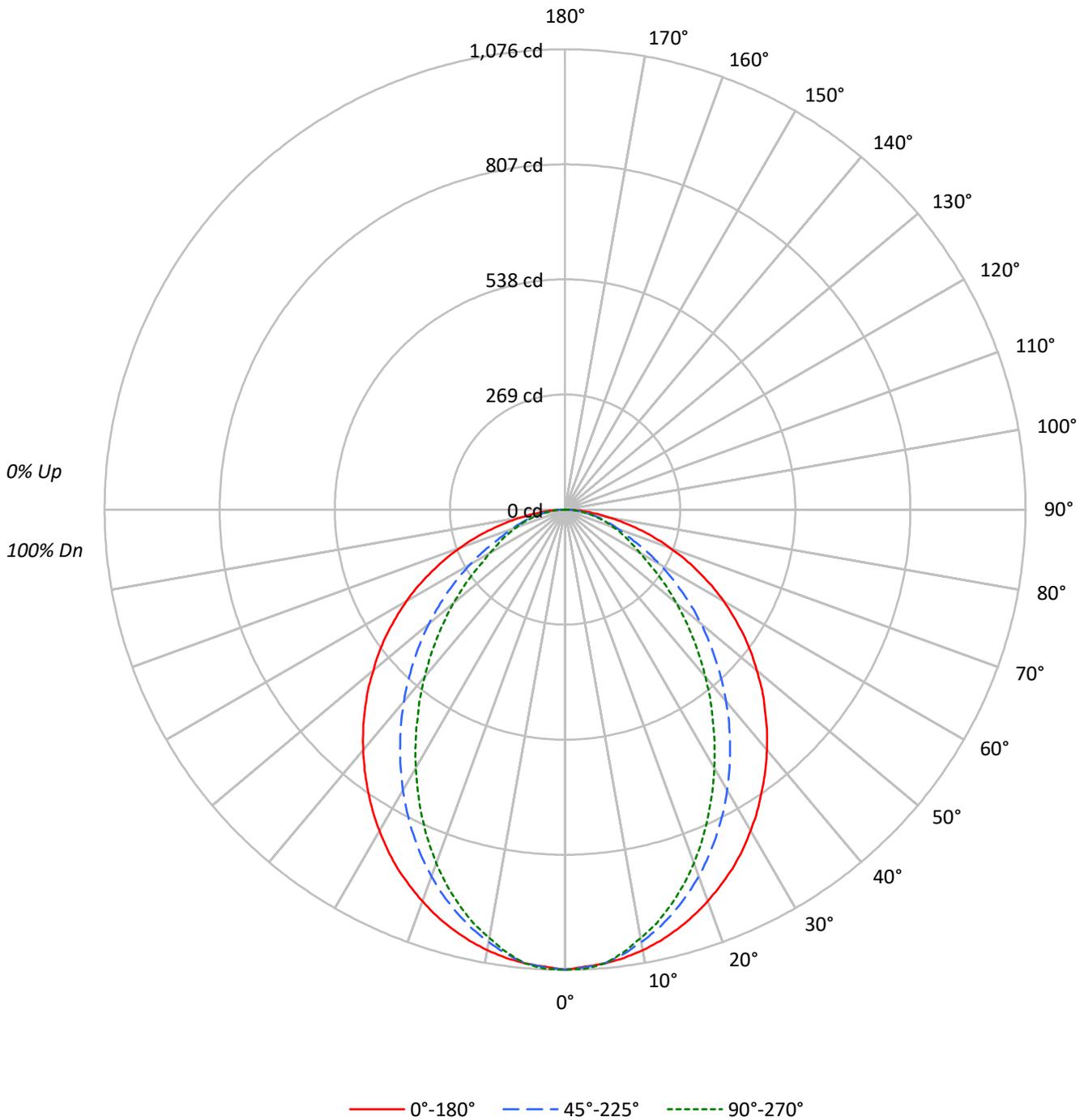
Lumens per Lamp: N/A
Luminaire Lumens: 2279.6 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86	86	86	86	
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73	73	73	73	
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63	63	
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55	55	55	55	
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48	48	48	48	
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43	43	43	43	
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38	38	38	38	
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34	34	34	34	
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31	31	31	31	
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28	28	28	28	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7604	7604	7604
5°	7558	7553	7558
10°	7508	7370	7301
15°	7432	7145	6998
20°	7332	6869	6621
25°	7221	6540	6171
30°	7080	6184	5694
35°	6926	5799	5197
40°	6770	5402	4707
45°	6605	4988	4220
50°	6429	4562	3735
55°	6267	4097	3248
60°	6047	3601	2853
65°	5748	3054	2653
70°	5397	2730	2482
75°	4878	2516	2341
80°	4238	2284	2186
85°	3309	2012	2012

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6605 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	4.4
10°-20°	276.3	12.1
20°-30°	390.3	17.1
30°-40°	429.7	18.8
40°-50°	400.8	17.6
50°-60°	320.0	14.0
60°-70°	215.3	9.4
70°-80°	114.7	5.0
80°-90°	31.9	1.4
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°	767.3	33.7
0°-40°	1197.0	52.5
0°-60°	1917.7	84.1
0°-90°	2279.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2279.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1065	1074	1064	1061	1065	101
15°	1016	1010	976	959	956	286
25°	926	898	838	802	791	426
35°	802	755	672	619	602	502
45°	661	598	499	438	422	510
55°	508	432	332	280	264	454
65°	344	268	183	162	159	341
75°	179	118	92	86	86	190
85°	41	28	25	26	25	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1075.6	1075.6	1075.6	1075.6	1075.6
2.5°	1069.9	1078.8	1071.5	1073.1	1074.8
5°	1065.1	1073.9	1064.3	1061.1	1065.1
7.5°	1057.1	1064.3	1048.3	1041.1	1044.3
10°	1045.9	1050.7	1026.7	1017.1	1017.1
12.5°	1032.3	1032.3	1003.5	989.9	989.9
15°	1015.5	1009.9	976.2	959.4	956.2
17.5°	996.3	985.9	945.8	924.2	920.2
20°	974.6	957.8	913.0	884.9	880.1
22.5°	950.6	929.0	876.9	842.5	836.9
25°	925.8	897.8	838.5	801.7	791.2
27.5°	897.8	864.1	799.3	757.6	744.8
30°	867.3	828.9	757.6	711.2	697.5
32.5°	836.1	792.8	715.2	665.5	650.3
35°	802.5	755.2	671.9	619.1	602.2
37.5°	768.8	717.6	629.5	574.2	556.6
40°	733.6	677.5	585.4	528.6	510.1
42.5°	698.3	638.3	542.2	484.5	465.3
45°	660.7	598.2	498.9	438.1	422.1
47.5°	624.7	557.4	456.5	397.2	379.6
50°	584.6	515.0	414.8	355.6	339.6
52.5°	547.8	473.3	373.2	317.9	301.1
55°	508.5	431.7	332.4	279.5	263.5
57.5°	467.7	390.0	293.1	243.5	228.2
60°	427.7	348.4	254.7	209.0	201.8
62.5°	386.8	309.1	218.6	183.4	178.6
65°	343.6	268.3	182.6	161.8	158.6
67.5°	302.7	229.0	153.8	141.8	138.5
70°	261.1	189.8	132.1	121.7	120.1
72.5°	220.2	152.2	111.3	104.1	102.5
75°	178.6	118.5	92.1	86.5	85.7
77.5°	140.1	88.9	72.9	70.5	68.9
80°	104.1	66.5	56.1	54.5	53.7
82.5°	71.3	45.6	40.0	40.0	38.4
85°	40.8	28.0	24.8	25.6	24.8
87.5°	15.2	12.0	11.2	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)