

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: P1056492

Luminaire Tested: S125R3DR-S850D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056492
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-S850D950-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, 90 CRI LEDS
Ballast/Driver: -

Summary

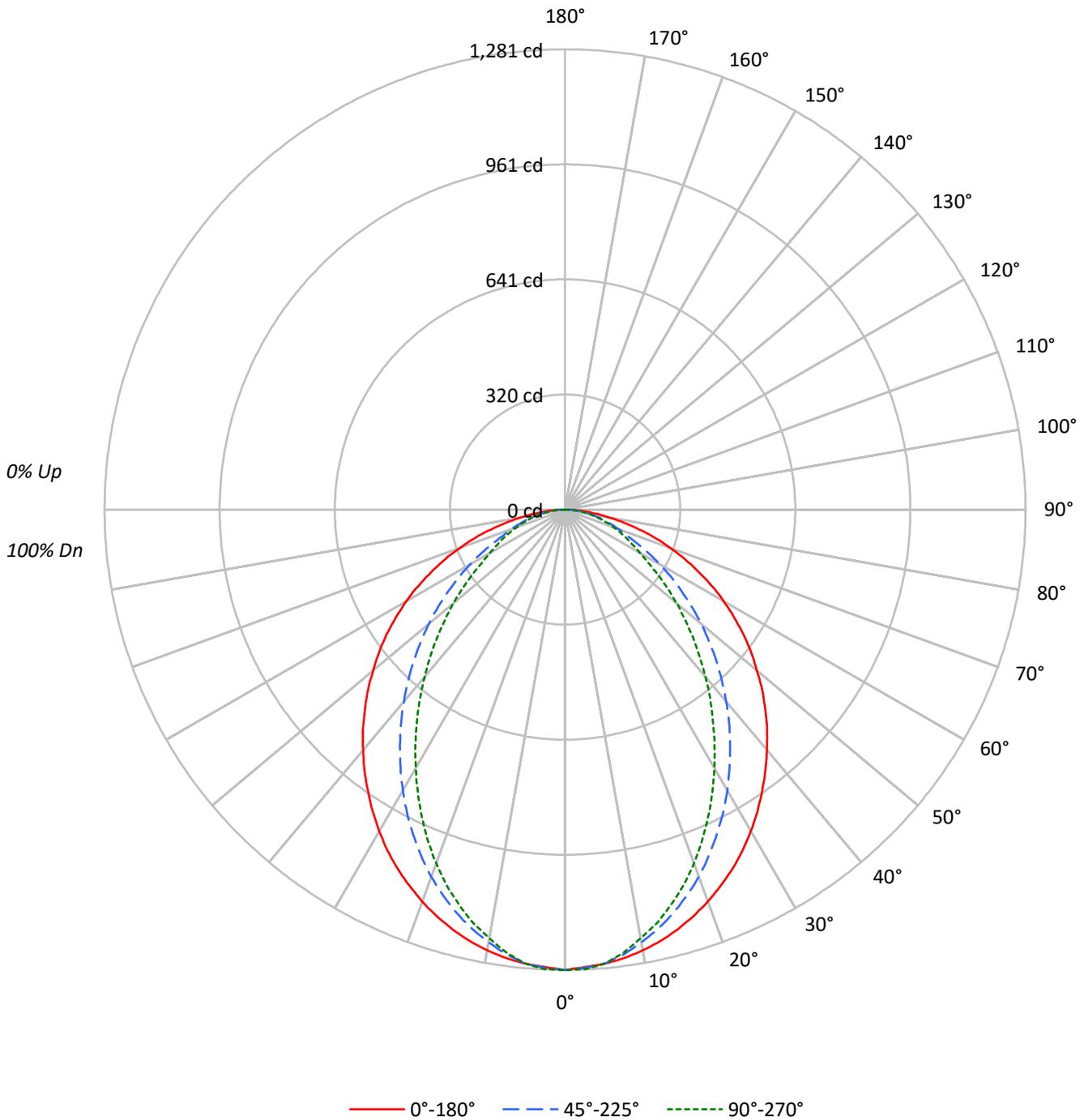
Lumens per Lamp: N/A
Luminaire Lumens: 2715.5 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86				86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55				55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48				48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34				34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31				31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9057	9057	9057
5°	9004	8997	9004
10°	8944	8779	8697
15°	8853	8511	8337
20°	8734	8182	7887
25°	8602	7791	7352
30°	8434	7367	6783
35°	8249	6908	6191
40°	8065	6436	5608
45°	7869	5942	5027
50°	7659	5435	4449
55°	7466	4879	3869
60°	7202	4290	3399
65°	6847	3638	3160
70°	6428	3253	2958
75°	5810	2996	2789
80°	5048	2719	2601
85°	3950	2401	2401

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7869 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	4.4
10°-20°	329.2	12.1
20°-30°	465.0	17.1
30°-40°	511.9	18.8
40°-50°	477.5	17.6
50°-60°	381.1	14.0
60°-70°	256.5	9.4
70°-80°	136.6	5.0
80°-90°	38.0	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°	914.0	33.7
0°-40°	1425.8	52.5
0°-60°	2284.4	84.1
0°-90°	2715.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2715.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1269	1279	1268	1264	1269	120
15°	1210	1203	1163	1143	1139	341
25°	1103	1069	999	955	943	508
35°	956	900	800	737	717	598
45°	787	713	594	522	503	608
55°	606	514	396	333	314	541
65°	409	320	218	193	189	406
75°	213	141	110	103	102	227
85°	49	33	30	30	30	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1281.2	1281.2	1281.2	1281.2	1281.2
2.5°	1274.5	1285.0	1276.5	1278.4	1280.3
5°	1268.8	1279.3	1267.9	1264.1	1268.8
7.5°	1259.3	1267.9	1248.8	1240.2	1244.0
10°	1245.9	1251.6	1223.0	1211.6	1211.6
12.5°	1229.7	1229.7	1195.4	1179.1	1179.1
15°	1209.7	1203.0	1162.9	1142.9	1139.1
17.5°	1186.8	1174.4	1126.7	1100.9	1096.1
20°	1161.0	1141.0	1087.6	1054.2	1048.4
22.5°	1132.4	1106.6	1044.6	1003.6	996.9
25°	1102.8	1069.4	998.8	955.0	942.6
27.5°	1069.4	1029.4	952.1	902.5	887.2
30°	1033.2	987.4	902.5	847.2	830.9
32.5°	996.0	944.5	851.9	792.8	774.6
35°	955.9	899.6	800.4	737.4	717.4
37.5°	915.8	854.8	749.8	684.0	663.0
40°	873.9	807.1	697.4	629.6	607.7
42.5°	831.9	760.3	645.9	577.2	554.3
45°	787.1	712.6	594.3	521.8	502.8
47.5°	744.1	664.0	543.8	473.2	452.2
50°	696.4	613.4	494.2	423.6	404.5
52.5°	652.5	563.8	444.6	378.7	358.7
55°	605.8	514.2	395.9	332.9	313.9
57.5°	557.1	464.6	349.2	290.0	271.9
60°	509.4	415.0	303.4	249.0	240.4
62.5°	460.8	368.2	260.4	218.5	212.7
65°	409.3	319.6	217.5	192.7	188.9
67.5°	360.6	272.8	183.2	168.9	165.0
70°	311.0	226.1	157.4	145.0	143.1
72.5°	262.4	181.3	132.6	124.0	122.1
75°	212.7	141.2	109.7	103.0	102.1
77.5°	167.0	105.9	86.8	84.0	82.0
80°	124.0	79.2	66.8	64.9	63.9
82.5°	84.9	54.4	47.7	47.7	45.8
85°	48.7	33.4	29.6	30.5	29.6
87.5°	18.1	14.3	13.4	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)