

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: P1056474

Luminaire Tested: S125R3DR-S850D840-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056474
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-S850D840-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

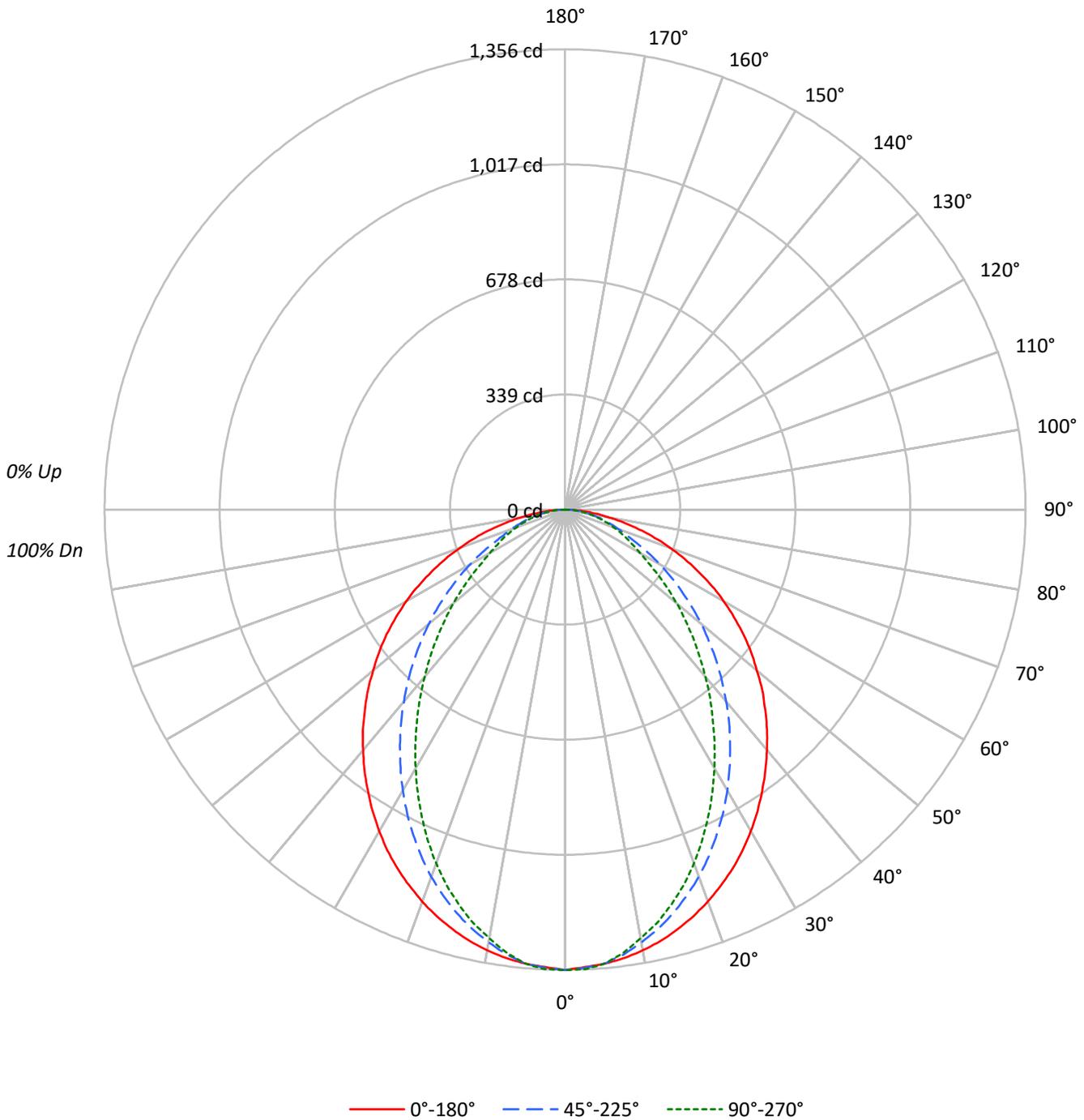
Lumens per Lamp: N/A
Luminaire Lumens: 2874.5 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9587	9587	9587
5°	9531	9524	9531
10°	9468	9293	9206
15°	9372	9009	8825
20°	9246	8661	8349
25°	9106	8247	7782
30°	8928	7798	7180
35°	8733	7312	6554
40°	8536	6812	5937
45°	8329	6289	5321
50°	8108	5753	4709
55°	7904	5165	4094
60°	7625	4540	3598
65°	7246	3851	3345
70°	6804	3444	3131
75°	6151	3171	2953
80°	5345	2878	2756
85°	4177	2539	2539

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8329 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	4.4
10°-20°	348.4	12.1
20°-30°	492.2	17.1
30°-40°	541.8	18.8
40°-50°	505.4	17.6
50°-60°	403.5	14.0
60°-70°	271.5	9.4
70°-80°	144.6	5.0
80°-90°	40.2	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°	967.5	33.7
0°-40°	1509.3	52.5
0°-60°	2418.2	84.1
0°-90°	2874.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2874.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1356	1356	1356	1356	1356	
5°	1343	1354	1342	1338	1343	127
15°	1280	1273	1231	1210	1206	361
25°	1167	1132	1057	1011	998	537
35°	1012	952	847	781	759	633
45°	833	754	629	552	532	643
55°	641	544	419	352	332	572
65°	433	338	230	204	200	430
75°	225	150	116	109	108	240
85°	52	35	31	32	31	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.2	1356.2	1356.2	1356.2	1356.2
2.5°	1349.2	1360.3	1351.2	1353.2	1355.2
5°	1343.1	1354.2	1342.1	1338.1	1343.1
7.5°	1333.0	1342.1	1321.9	1312.8	1316.9
10°	1318.9	1324.9	1294.6	1282.5	1282.5
12.5°	1301.7	1301.7	1265.4	1248.2	1248.2
15°	1280.5	1273.4	1231.0	1209.8	1205.8
17.5°	1256.3	1243.1	1192.7	1165.4	1160.3
20°	1229.0	1207.8	1151.2	1115.9	1109.8
22.5°	1198.7	1171.4	1105.8	1062.4	1055.3
25°	1167.4	1132.1	1057.3	1010.9	997.7
27.5°	1132.1	1089.6	1007.8	955.3	939.2
30°	1093.7	1045.2	955.3	896.8	879.6
32.5°	1054.3	999.8	901.8	839.2	820.0
35°	1011.9	952.3	847.3	780.6	759.4
37.5°	969.5	904.8	793.8	724.1	701.9
40°	925.0	854.3	738.2	666.5	643.3
42.5°	880.6	804.9	683.7	611.0	586.7
45°	833.1	754.4	629.1	552.4	532.2
47.5°	787.7	702.9	575.6	500.9	478.7
50°	737.2	649.3	523.1	448.4	428.2
52.5°	690.7	596.8	470.6	400.9	379.7
55°	641.3	544.3	419.1	352.4	332.2
57.5°	589.8	491.8	369.6	307.0	287.8
60°	539.3	439.3	321.1	263.6	254.5
62.5°	487.8	389.8	275.7	231.3	225.2
65°	433.2	338.3	230.2	204.0	200.0
67.5°	381.7	288.8	193.9	178.7	174.7
70°	329.2	239.3	166.6	153.5	151.5
72.5°	277.7	191.9	140.4	131.3	129.3
75°	225.2	149.5	116.1	109.1	108.1
77.5°	176.7	112.1	91.9	88.9	86.8
80°	131.3	83.8	70.7	68.7	67.7
82.5°	89.9	57.6	50.5	50.5	48.5
85°	51.5	35.3	31.3	32.3	31.3
87.5°	19.2	15.1	14.1	15.1	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)