

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: P1056367

Luminaire Tested: S125R3DR-S1090D850-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056367
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-S1090D850-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

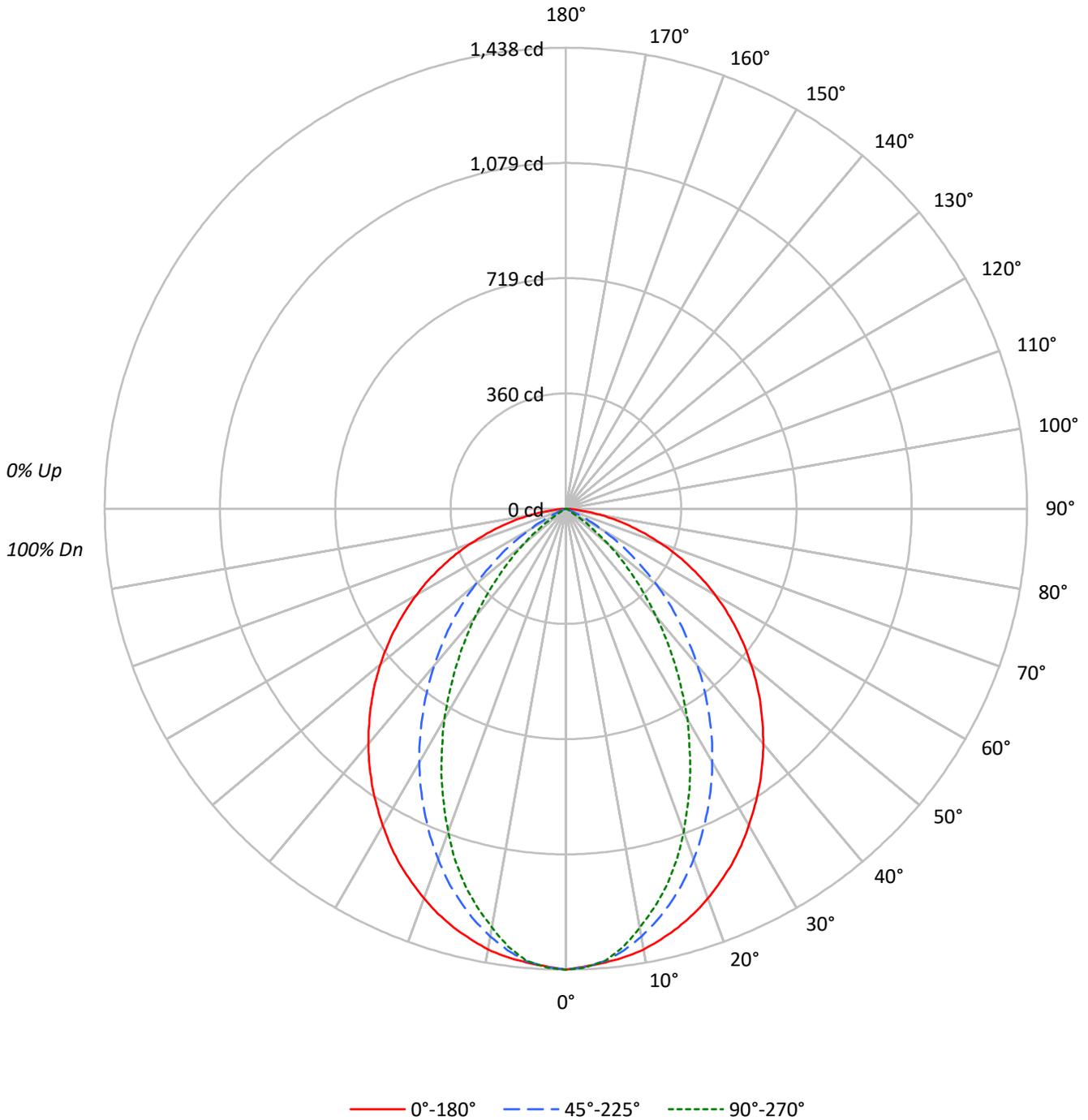
Lumens per Lamp: N/A
Luminaire Lumens: 2330.7 lumens
Efficiency: N/A
Efficacy: 67.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78				78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69				69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61				61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55				55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49				49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45				45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10166	10166	10166
5°	10083	10053	10043
10°	10025	9729	9524
15°	9899	9293	8897
20°	9735	8759	8073
25°	9549	8137	7159
30°	9318	7457	6189
35°	9089	6703	5117
40°	8838	5892	4050
45°	8577	5030	2935
50°	8291	4059	1896
55°	7974	2968	843
60°	7597	1834	242
65°	7128	667	144
70°	6451	236	60
75°	5605	79	38
80°	4295	57	0
85°	1963	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8577 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	5.7
10°-20°	358.6	15.4
20°-30°	485.2	20.8
30°-40°	498.4	21.4
40°-50°	412.9	17.7
50°-60°	265.1	11.4
60°-70°	128.1	5.5
70°-80°	43.3	1.9
80°-90°	5.6	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°	977.4	41.9
0°-40°	1475.8	63.3
0°-60°	2153.8	92.4
0°-90°	2330.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2330.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1421	1432	1417	1408	1415	135
15°	1352	1335	1270	1226	1216	381
25°	1224	1164	1043	949	918	563
35°	1053	952	777	641	593	658
45°	858	717	503	348	294	662
55°	647	475	241	106	68	578
65°	426	235	40	11	9	422
75°	205	44	3	1	1	218
85°	24	0	0	0	0	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.0	1438.0	1438.0	1438.0	1438.0
2.5°	1429.4	1440.8	1430.8	1429.4	1432.3
5°	1420.9	1432.3	1416.6	1408.0	1415.2
7.5°	1410.9	1416.6	1389.5	1375.3	1378.1
10°	1396.6	1395.2	1355.3	1331.1	1326.8
12.5°	1375.3	1368.1	1315.4	1281.2	1274.1
15°	1352.5	1335.4	1269.8	1225.6	1215.6
17.5°	1325.4	1298.3	1219.9	1162.9	1148.7
20°	1294.0	1257.0	1164.3	1094.5	1073.1
22.5°	1259.8	1212.8	1105.9	1023.3	994.7
25°	1224.2	1164.3	1043.2	949.1	917.8
27.5°	1184.3	1114.5	980.5	873.6	835.1
30°	1141.5	1061.7	913.5	796.7	758.2
32.5°	1097.4	1009.0	846.5	719.7	672.7
35°	1053.2	952.0	776.7	641.3	592.9
37.5°	1006.1	895.0	708.3	567.2	514.5
40°	957.7	836.6	638.5	490.2	438.9
42.5°	907.8	776.7	568.6	417.6	364.8
45°	857.9	716.8	503.1	347.7	293.6
47.5°	806.6	655.6	434.7	279.3	232.3
50°	753.9	595.7	369.1	218.0	172.4
52.5°	701.2	534.4	302.1	158.2	116.9
55°	647.0	474.6	240.8	105.5	68.4
57.5°	592.9	413.3	183.8	58.4	25.7
60°	537.3	354.9	129.7	20.0	17.1
62.5°	483.1	292.2	81.2	15.7	12.8
65°	426.1	235.1	39.9	11.4	8.6
67.5°	370.5	181.0	17.1	7.1	4.3
70°	312.1	131.1	11.4	4.3	2.9
72.5°	258.0	84.1	7.1	2.9	1.4
75°	205.2	44.2	2.9	1.4	1.4
77.5°	153.9	18.5	1.4	1.4	1.4
80°	105.5	8.6	1.4	1.4	0.0
82.5°	62.7	2.9	1.4	1.4	0.0
85°	24.2	0.0	0.0	0.0	0.0
87.5°	1.4	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)