

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: P1056368

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
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-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

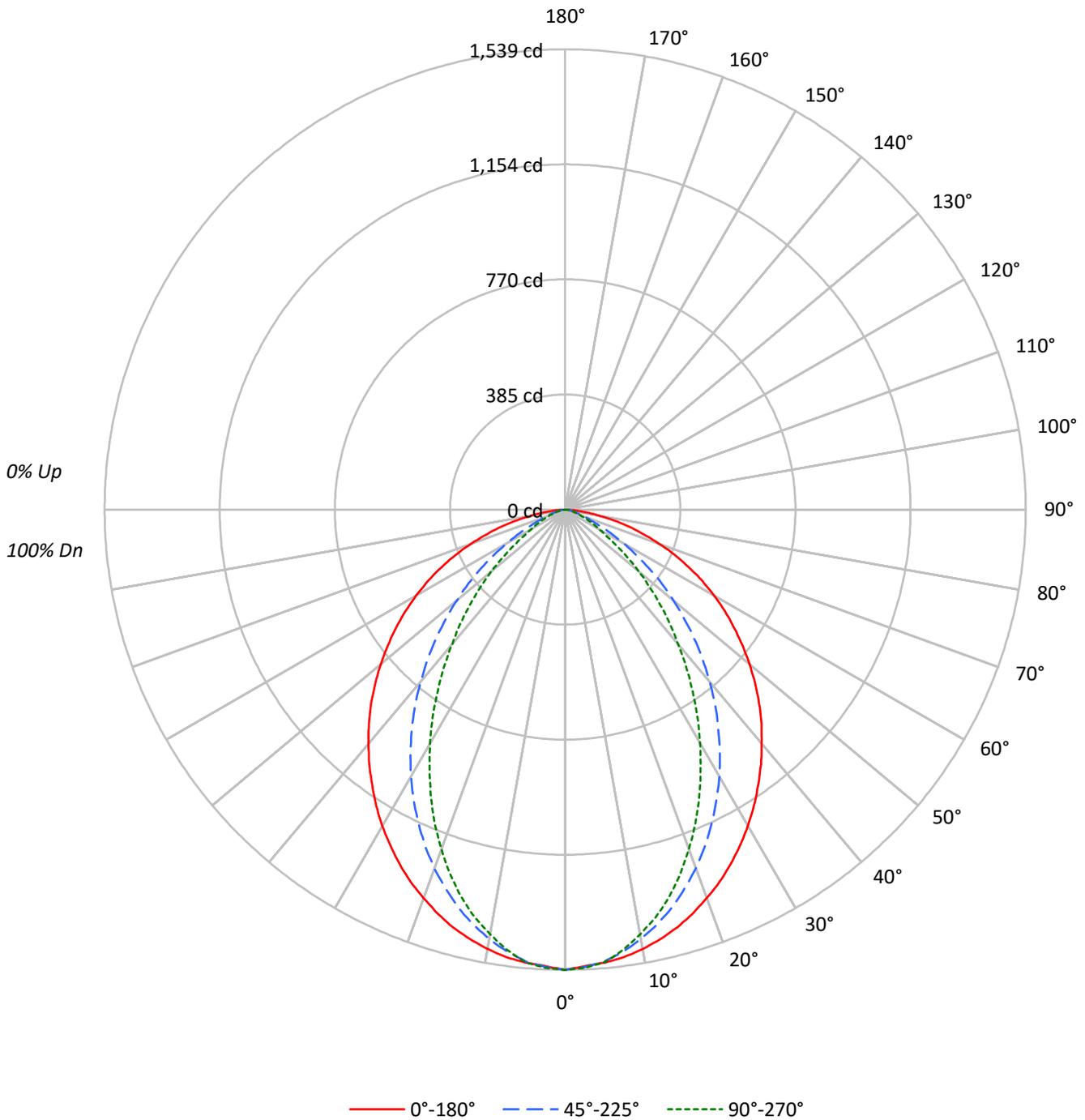
Lumens per Lamp: N/A
Luminaire Lumens: 2781.9 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10880	10880	10880
5°	10791	10760	10781
10°	10711	10465	10353
15°	10587	10086	9815
20°	10400	9606	9092
25°	10205	9037	8270
30°	9969	8411	7364
35°	9704	7699	6408
40°	9430	6918	5419
45°	9162	6099	4488
50°	8840	5188	3527
55°	8502	4215	2565
60°	8120	3143	1834
65°	7628	2074	1430
70°	6893	1443	1002
75°	5995	934	778
80°	4698	696	639
85°	2425	576	462

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9162 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.4	5.2
10°-20°	389.8	14.0
20°-30°	538.9	19.4
30°-40°	571.0	20.5
40°-50°	498.4	17.9
50°-60°	354.5	12.7
60°-70°	197.1	7.1
70°-80°	75.8	2.7
80°-90°	13.1	0.5
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°	1072.0	38.5
0°-40°	1643.0	59.1
0°-60°	2495.9	89.7
0°-90°	2781.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2781.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1521	1532	1516	1512	1519	144
15°	1446	1434	1378	1348	1341	407
25°	1308	1264	1159	1087	1060	602
35°	1124	1048	892	784	742	703
45°	916	807	610	487	449	706
55°	690	553	342	237	208	617
65°	456	299	124	91	86	451
75°	220	86	34	28	28	233
85°	30	9	7	6	6	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1539.1	1539.1	1539.1	1539.1	1539.1
2.5°	1527.7	1543.4	1530.6	1532.0	1533.4
5°	1520.6	1532.0	1516.3	1512.1	1519.2
7.5°	1509.2	1517.8	1490.7	1480.7	1485.0
10°	1492.1	1495.0	1457.9	1443.7	1442.2
12.5°	1470.7	1466.5	1420.9	1398.1	1396.6
15°	1446.5	1433.7	1378.1	1348.2	1341.1
17.5°	1416.6	1396.6	1328.2	1289.7	1278.3
20°	1382.4	1355.3	1276.9	1227.0	1208.5
22.5°	1348.2	1311.1	1219.9	1157.2	1137.3
25°	1308.3	1264.1	1158.6	1087.4	1060.3
27.5°	1265.5	1212.8	1095.9	1013.3	980.5
30°	1221.3	1160.1	1030.4	937.7	902.1
32.5°	1174.3	1104.5	962.0	860.8	823.7
35°	1124.4	1047.5	892.1	783.8	742.5
37.5°	1074.6	989.0	823.7	708.3	665.5
40°	1021.8	929.2	749.6	631.3	587.2
42.5°	970.5	867.9	679.8	558.7	518.7
45°	916.4	806.6	610.0	487.4	448.9
47.5°	860.8	742.5	540.1	420.4	381.9
50°	803.8	679.8	471.7	354.9	320.7
52.5°	746.8	617.1	407.6	292.2	262.2
55°	689.8	553.0	342.0	236.6	208.1
57.5°	632.8	490.2	280.8	185.3	159.6
60°	574.3	426.1	222.3	136.8	129.7
62.5°	515.9	363.4	172.4	112.6	106.9
65°	456.0	299.3	124.0	91.2	85.5
67.5°	396.2	240.8	89.8	69.8	65.6
70°	333.5	183.8	69.8	52.7	48.5
72.5°	273.6	132.5	49.9	38.5	37.1
75°	219.5	85.5	34.2	28.5	28.5
77.5°	165.3	51.3	24.2	21.4	21.4
80°	115.4	29.9	17.1	15.7	15.7
82.5°	69.8	15.7	11.4	10.0	10.0
85°	29.9	8.6	7.1	5.7	5.7
87.5°	5.7	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)