

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: P1056369

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056369  
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-S1090D850-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: -

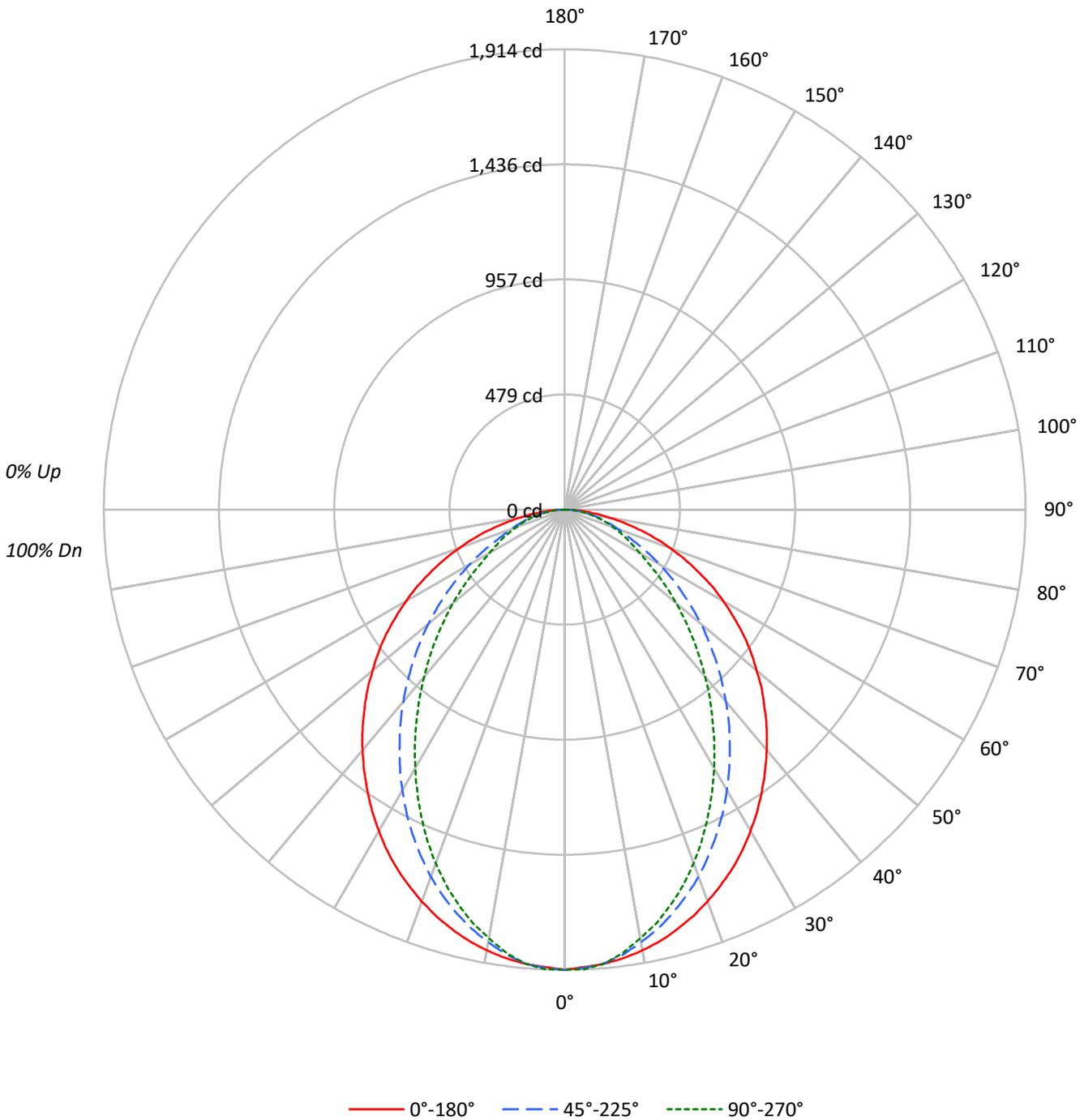
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4056.6 lumens  
Efficiency: N/A  
Efficacy: 116.9 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): 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	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°	13531	13531	13531
5°	13450	13440	13450
10°	13360	13115	12992
15°	13226	12714	12454
20°	13048	12223	11783
25°	12851	11639	10983
30°	12599	11005	10133
35°	12324	10319	9249
40°	12047	9614	8378
45°	11754	8877	7508
50°	11442	8119	6646
55°	11154	7289	5779
60°	10760	6408	5077
65°	10227	5435	4720
70°	9603	4859	4419
75°	8680	4477	4165
80°	7544	4063	3888
85°	5897	3585	3585

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11754 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.1	4.4
10°-20°	491.7	12.1
20°-30°	694.6	17.1
30°-40°	764.6	18.8
40°-50°	713.3	17.6
50°-60°	569.4	14.0
60°-70°	383.2	9.4
70°-80°	204.1	5.0
80°-90°	56.7	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°	1365.4	33.7
0°-40°	2130.0	52.5
0°-60°	3412.6	84.1
0°-90°	4056.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4056.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1914	1914	1914	1914	1914	
5°	1895	1911	1894	1888	1895	180
15°	1807	1797	1737	1707	1702	509
25°	1648	1598	1492	1427	1408	758
35°	1428	1344	1196	1102	1072	894
45°	1176	1065	888	780	751	908
55°	905	768	591	497	469	808
65°	611	477	325	288	282	606
75°	318	211	164	154	152	339
85°	73	50	44	46	44	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1914.0	1914.0	1914.0	1914.0	1914.0
2.5°	1904.0	1919.7	1906.8	1909.7	1912.5
5°	1895.4	1911.1	1894.0	1888.3	1895.4
7.5°	1881.2	1894.0	1865.5	1852.7	1858.4
10°	1861.2	1869.8	1827.0	1809.9	1809.9
12.5°	1837.0	1837.0	1785.7	1761.5	1761.5
15°	1807.1	1797.1	1737.2	1707.3	1701.6
17.5°	1772.9	1754.3	1683.1	1644.6	1637.5
20°	1734.4	1704.5	1624.7	1574.8	1566.2
22.5°	1691.6	1653.2	1560.5	1499.2	1489.3
25°	1647.5	1597.6	1492.1	1426.6	1408.0
27.5°	1597.6	1537.7	1422.3	1348.2	1325.4
30°	1543.4	1475.0	1348.2	1265.5	1241.3
32.5°	1487.8	1410.9	1272.6	1184.3	1157.2
35°	1428.0	1343.9	1195.7	1101.6	1071.7
37.5°	1368.1	1276.9	1120.2	1021.8	990.5
40°	1305.4	1205.7	1041.8	940.6	907.8
42.5°	1242.7	1135.8	964.8	862.2	828.0
45°	1175.7	1064.6	887.9	779.6	751.0
47.5°	1111.6	991.9	812.3	706.9	675.5
50°	1040.4	916.4	738.2	632.8	604.3
52.5°	974.8	842.3	664.1	565.8	535.9
55°	905.0	768.1	591.4	497.4	468.9
57.5°	832.3	694.0	521.6	433.2	406.2
60°	761.0	619.9	453.2	372.0	359.1
62.5°	688.3	550.1	389.1	326.4	317.8
65°	611.4	477.4	324.9	287.9	282.2
67.5°	538.7	407.6	273.6	252.2	246.5
70°	464.6	337.8	235.1	216.6	213.8
72.5°	391.9	270.8	198.1	185.3	182.4
75°	317.8	210.9	163.9	153.9	152.5
77.5°	249.4	158.2	129.7	125.4	122.6
80°	185.3	118.3	99.8	96.9	95.5
82.5°	126.8	81.2	71.3	71.3	68.4
85°	72.7	49.9	44.2	45.6	44.2
87.5°	27.1	21.4	20.0	21.4	21.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)