

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: P1056384

Luminaire Tested: S125R3DR-S1090D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056384  
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-S1090D950-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: -

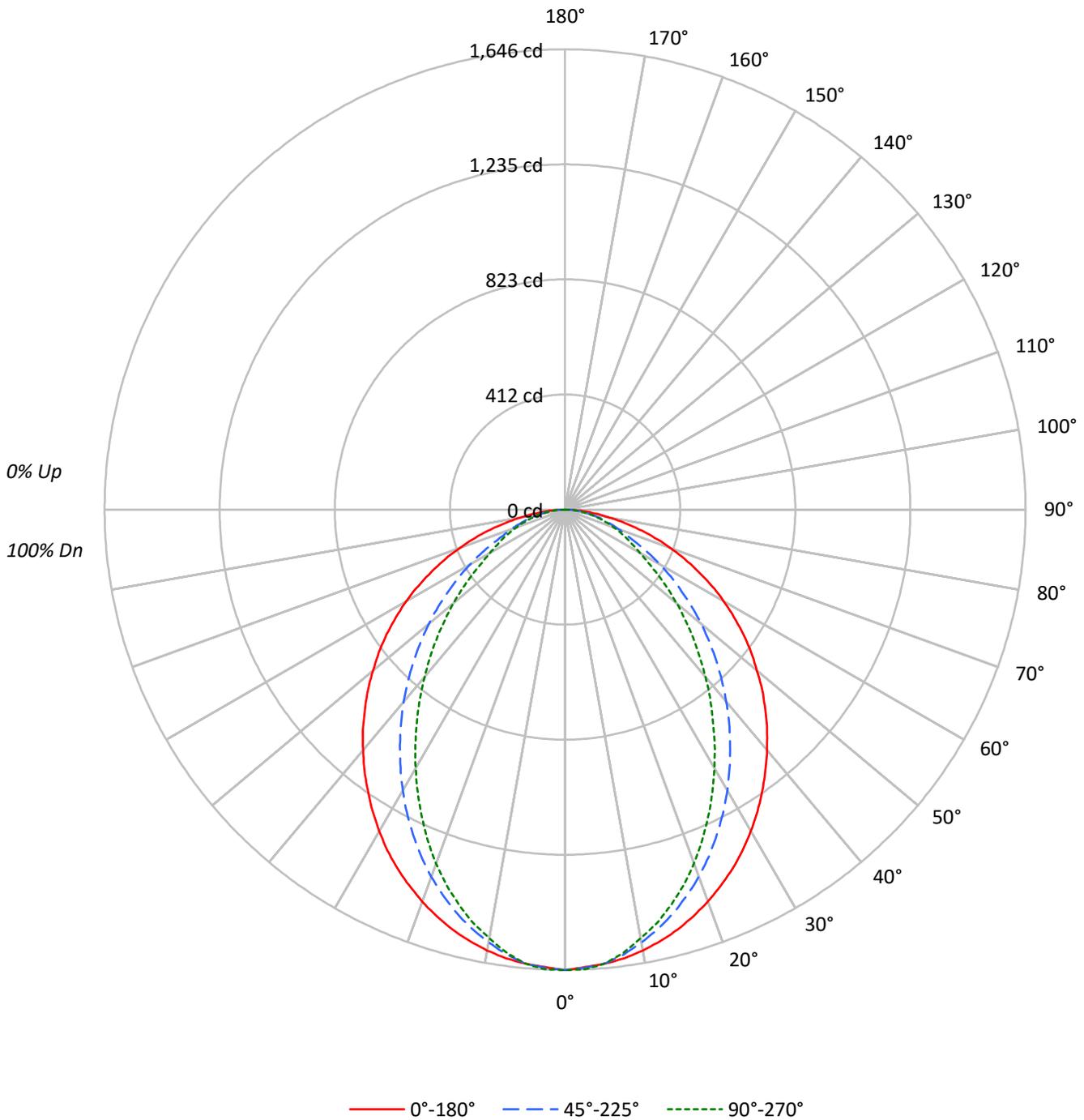
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3489.6 lumens  
Efficiency: N/A  
Efficacy: 100.6 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°	11640	11640	11640
5°	11571	11562	11571
10°	11493	11282	11177
15°	11377	10937	10713
20°	11224	10514	10136
25°	11054	10012	9448
30°	10838	9467	8716
35°	10601	8877	7956
40°	10363	8270	7206
45°	10112	7636	6459
50°	9842	6984	5717
55°	9595	6271	4971
60°	9257	5513	4367
65°	8797	4675	4060
70°	8262	4181	3801
75°	7468	3851	3584
80°	6489	3493	3342
85°	5069	3082	3082

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10112 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.0	4.4
10°-20°	423.0	12.1
20°-30°	597.5	17.1
30°-40°	657.8	18.8
40°-50°	613.6	17.6
50°-60°	489.8	14.0
60°-70°	329.6	9.4
70°-80°	175.6	5.0
80°-90°	48.8	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°	1174.5	33.7
0°-40°	1832.3	52.5
0°-60°	2935.7	84.1
0°-90°	3489.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3489.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1630	1644	1629	1624	1630	155
15°	1554	1546	1494	1469	1464	438
25°	1417	1374	1284	1227	1211	652
35°	1228	1156	1029	948	922	769
45°	1011	916	764	671	646	781
55°	778	661	509	428	403	695
65°	526	411	280	248	243	522
75°	273	181	141	132	131	291
85°	62	43	38	39	38	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1646.5	1646.5	1646.5	1646.5	1646.5
2.5°	1637.9	1651.4	1640.3	1642.8	1645.2
5°	1630.5	1644.0	1629.3	1624.4	1630.5
7.5°	1618.3	1629.3	1604.8	1593.7	1598.6
10°	1601.1	1608.4	1571.7	1557.0	1557.0
12.5°	1580.3	1580.3	1536.1	1515.3	1515.3
15°	1554.5	1545.9	1494.4	1468.7	1463.8
17.5°	1525.1	1509.1	1447.8	1414.7	1408.6
20°	1492.0	1466.2	1397.6	1354.7	1347.3
22.5°	1455.2	1422.1	1342.4	1289.7	1281.1
25°	1417.2	1374.3	1283.6	1227.2	1211.2
27.5°	1374.3	1322.8	1223.5	1159.8	1140.1
30°	1327.7	1268.9	1159.8	1088.6	1067.8
32.5°	1279.9	1213.7	1094.8	1018.8	995.5
35°	1228.4	1156.1	1028.6	947.7	921.9
37.5°	1176.9	1098.5	963.6	879.0	852.0
40°	1123.0	1037.2	896.2	809.1	780.9
42.5°	1069.0	977.1	830.0	741.7	712.3
45°	1011.4	915.8	763.8	670.6	646.1
47.5°	956.2	853.3	698.8	608.1	581.1
50°	894.9	788.3	635.0	544.3	519.8
52.5°	838.6	724.5	571.3	486.7	461.0
55°	778.5	660.8	508.8	427.9	403.3
57.5°	716.0	597.0	448.7	372.7	349.4
60°	654.7	533.3	389.9	320.0	308.9
62.5°	592.1	473.2	334.7	280.7	273.4
65°	525.9	410.7	279.5	247.6	242.7
67.5°	463.4	350.6	235.4	217.0	212.1
70°	399.7	290.6	202.3	186.3	183.9
72.5°	337.1	232.9	170.4	159.4	156.9
75°	273.4	181.4	141.0	132.4	131.2
77.5°	214.5	136.1	111.6	107.9	105.4
80°	159.4	101.8	85.8	83.4	82.1
82.5°	109.1	69.9	61.3	61.3	58.8
85°	62.5	42.9	38.0	39.2	38.0
87.5°	23.3	18.4	17.2	18.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)