

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: P1056391

Luminaire Tested: S125R3DR-S1270D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056391  
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-S1270D840-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

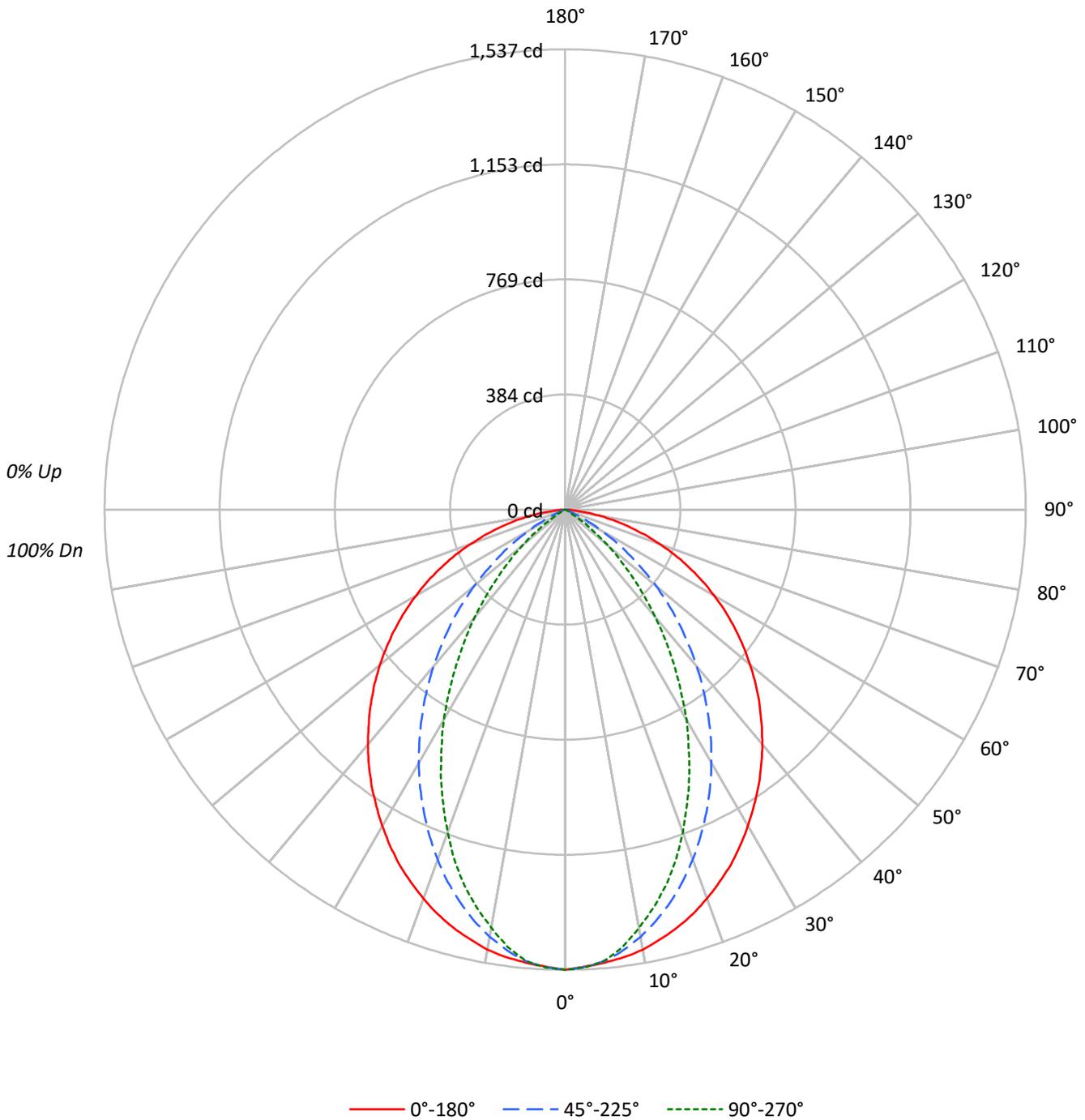
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2490.8 lumens  
Efficiency: N/A  
Efficacy: 59.4 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): 41.9  
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°	10863	10863	10863
5°	10776	10743	10733
10°	10714	10397	10178
15°	10578	9931	9508
20°	10404	9361	8627
25°	10205	8696	7650
30°	9959	7970	6614
35°	9713	7164	5468
40°	9445	6297	4329
45°	9167	5375	3136
50°	8861	4339	2027
55°	8523	3172	901
60°	8118	1960	259
65°	7618	713	152
70°	6893	252	62
75°	5990	82	41
80°	4588	61	0
85°	2101	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9167 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.7	5.7
10°-20°	383.3	15.4
20°-30°	518.5	20.8
30°-40°	532.6	21.4
40°-50°	441.3	17.7
50°-60°	283.3	11.4
60°-70°	136.8	5.5
70°-80°	46.3	1.9
80°-90°	5.9	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°	1044.5	41.9
0°-40°	1577.1	63.3
0°-60°	2301.7	92.4
0°-90°	2490.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2490.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1518	1531	1514	1505	1512	144
15°	1445	1427	1357	1310	1299	407
25°	1308	1244	1115	1014	981	602
35°	1126	1017	830	685	634	704
45°	917	766	538	372	314	707
55°	692	507	257	113	73	618
65°	455	251	43	12	9	451
75°	219	47	3	2	2	233
85°	26	0	0	0	0	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1536.7	1536.7	1536.7	1536.7	1536.7
2.5°	1527.6	1539.8	1529.1	1527.6	1530.7
5°	1518.5	1530.7	1513.9	1504.8	1512.4
7.5°	1507.8	1513.9	1485.0	1469.7	1472.8
10°	1492.6	1491.1	1448.4	1422.5	1417.9
12.5°	1469.7	1462.1	1405.8	1369.2	1361.6
15°	1445.4	1427.1	1357.0	1309.8	1299.1
17.5°	1416.4	1387.5	1303.7	1242.8	1227.6
20°	1382.9	1343.3	1244.3	1169.7	1146.8
22.5°	1346.4	1296.1	1181.9	1093.5	1063.1
25°	1308.3	1244.3	1114.9	1014.3	980.8
27.5°	1265.6	1191.0	1047.8	933.6	892.5
30°	1220.0	1134.7	976.3	851.4	810.3
32.5°	1172.7	1078.3	904.7	769.1	718.9
35°	1125.5	1017.4	830.1	685.4	633.6
37.5°	1075.3	956.5	756.9	606.2	549.8
40°	1023.5	894.0	682.3	523.9	469.1
42.5°	970.2	830.1	607.7	446.2	389.9
45°	916.9	766.1	537.6	371.6	313.7
47.5°	862.0	700.6	464.5	298.5	248.3
50°	805.7	636.6	394.5	233.0	184.3
52.5°	749.3	571.1	322.9	169.1	124.9
55°	691.5	507.2	257.4	112.7	73.1
57.5°	633.6	441.7	196.5	62.4	27.4
60°	574.2	379.2	138.6	21.3	18.3
62.5°	516.3	312.2	86.8	16.8	13.7
65°	455.4	251.3	42.6	12.2	9.1
67.5°	396.0	193.4	18.3	7.6	4.6
70°	333.5	140.1	12.2	4.6	3.0
72.5°	275.7	89.9	7.6	3.0	1.5
75°	219.3	47.2	3.0	1.5	1.5
77.5°	164.5	19.8	1.5	1.5	1.5
80°	112.7	9.1	1.5	1.5	0.0
82.5°	67.0	3.0	1.5	1.5	0.0
85°	25.9	0.0	0.0	0.0	0.0
87.5°	1.5	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)