

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: P1056393

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056393  
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-S1270D840-X4F0-XX-UDD-FLL-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

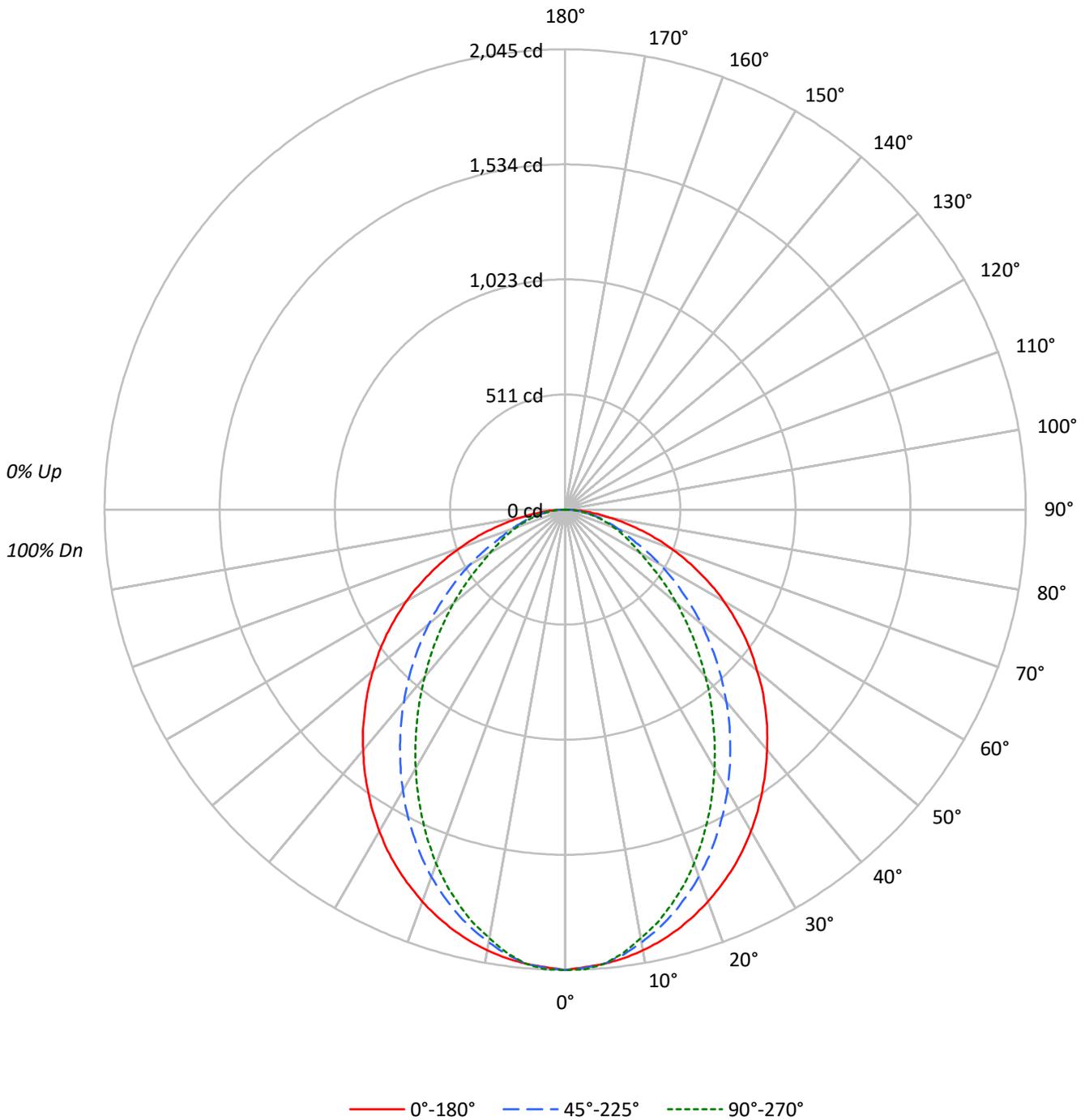
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4335.2 lumens  
Efficiency: N/A  
Efficacy: 103.5 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): 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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86				86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55				55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48				48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34				34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31				31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14460	14460	14460
5°	14374	14364	14374
10°	14279	14016	13885
15°	14134	13588	13309
20°	13944	13062	12592
25°	13733	12438	11738
30°	13464	11761	10829
35°	13170	11028	9884
40°	12874	10274	8953
45°	12562	9486	8024
50°	12228	8676	7102
55°	11920	7791	6176
60°	11499	6847	5426
65°	10930	5809	5045
70°	10262	5194	4723
75°	9276	4783	4452
80°	8061	4340	4152
85°	6302	3828	3828

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12562 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.4	4.4
10°-20°	525.5	12.1
20°-30°	742.3	17.1
30°-40°	817.2	18.8
40°-50°	762.2	17.6
50°-60°	608.5	14.0
60°-70°	409.5	9.4
70°-80°	218.1	5.0
80°-90°	60.6	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°	1459.1	33.7
0°-40°	2276.3	52.5
0°-60°	3647.0	84.1
0°-90°	4335.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4335.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2045	2045	2045	2045	2045	
5°	2026	2042	2024	2018	2026	192
15°	1931	1920	1857	1825	1818	544
25°	1761	1707	1595	1525	1505	810
35°	1526	1436	1278	1177	1145	955
45°	1256	1138	949	833	803	970
55°	967	821	632	532	501	863
65°	653	510	347	308	302	648
75°	340	225	175	164	163	362
85°	78	53	47	49	47	93
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2045.4	2045.4	2045.4	2045.4	2045.4
2.5°	2034.8	2051.5	2037.8	2040.9	2043.9
5°	2025.6	2042.4	2024.1	2018.0	2025.6
7.5°	2010.4	2024.1	1993.6	1979.9	1986.0
10°	1989.1	1998.2	1952.5	1934.3	1934.3
12.5°	1963.2	1963.2	1908.4	1882.5	1882.5
15°	1931.2	1920.5	1856.6	1824.6	1818.5
17.5°	1894.7	1874.9	1798.7	1757.6	1750.0
20°	1853.5	1821.5	1736.3	1683.0	1673.8
22.5°	1807.8	1766.7	1667.7	1602.2	1591.6
25°	1760.6	1707.3	1594.6	1524.6	1504.8
27.5°	1707.3	1643.4	1520.0	1440.8	1416.4
30°	1649.4	1576.3	1440.8	1352.5	1326.6
32.5°	1590.0	1507.8	1360.1	1265.6	1236.7
35°	1526.1	1436.2	1277.8	1177.3	1145.3
37.5°	1462.1	1364.6	1197.1	1092.0	1058.5
40°	1395.1	1288.5	1113.3	1005.2	970.2
42.5°	1328.1	1213.9	1031.1	921.4	884.9
45°	1256.5	1137.7	948.8	833.1	802.6
47.5°	1188.0	1060.0	868.1	755.4	721.9
50°	1111.8	979.3	788.9	676.2	645.8
52.5°	1041.8	900.1	709.7	604.6	572.7
55°	967.1	820.9	632.1	531.5	501.1
57.5°	889.5	741.7	557.4	463.0	434.1
60°	813.3	662.5	484.3	397.5	383.8
62.5°	735.6	587.9	415.8	348.8	339.6
65°	653.4	510.2	347.3	307.7	301.6
67.5°	575.7	435.6	292.4	269.6	263.5
70°	496.5	361.0	251.3	231.5	228.5
72.5°	418.8	289.4	211.7	198.0	194.9
75°	339.6	225.4	175.1	164.5	163.0
77.5°	266.5	169.1	138.6	134.0	131.0
80°	198.0	126.4	106.6	103.6	102.0
82.5°	135.5	86.8	76.2	76.2	73.1
85°	77.7	53.3	47.2	48.7	47.2
87.5°	28.9	22.8	21.3	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)