

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: P1056408

Luminaire Tested: S125R3DR-S1270D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056408
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-S1270D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

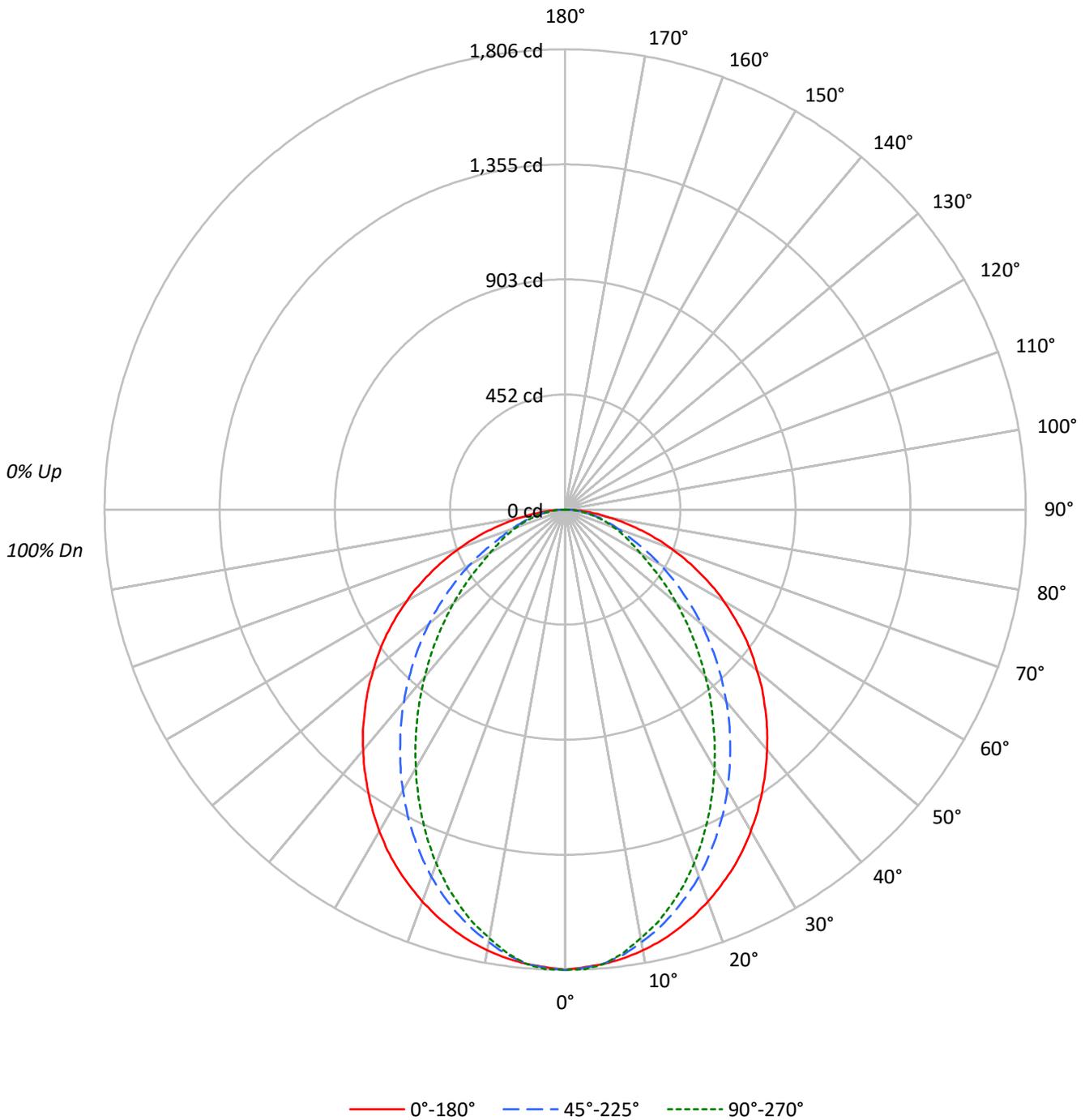
Lumens per Lamp: N/A
Luminaire Lumens: 3828.0 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	31	42	35	30	41	35	30	40	34	30	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12768	12768	12768
5°	12693	12683	12693
10°	12608	12376	12260
15°	12481	11998	11752
20°	12313	11534	11119
25°	12126	10983	10364
30°	11889	10385	9562
35°	11629	9737	8728
40°	11368	9072	7906
45°	11092	8376	7085
50°	10797	7661	6271
55°	10526	6879	5454
60°	10153	6047	4792
65°	9650	5129	4455
70°	9061	4587	4169
75°	8191	4225	3930
80°	7116	3831	3668
85°	5564	3382	3382

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11092 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.0	4.4
10°-20°	464.0	12.1
20°-30°	655.4	17.1
30°-40°	721.6	18.8
40°-50°	673.1	17.6
50°-60°	537.3	14.0
60°-70°	361.6	9.4
70°-80°	192.6	5.0
80°-90°	53.5	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°	1288.4	33.7
0°-40°	2010.0	52.5
0°-60°	3220.3	84.1
0°-90°	3828.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3828.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1806	1806	1806	1806	1806	
5°	1789	1803	1787	1782	1789	170
15°	1705	1696	1639	1611	1606	481
25°	1555	1508	1408	1346	1329	716
35°	1348	1268	1128	1040	1011	843
45°	1110	1005	838	736	709	857
55°	854	725	558	469	442	762
65°	577	450	307	272	266	572
75°	300	199	155	145	144	319
85°	69	47	42	43	42	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1806.1	1806.1	1806.1	1806.1	1806.1
2.5°	1796.7	1811.5	1799.4	1802.1	1804.8
5°	1788.6	1803.4	1787.3	1781.9	1788.6
7.5°	1775.2	1787.3	1760.4	1748.3	1753.7
10°	1756.4	1764.4	1724.1	1707.9	1707.9
12.5°	1733.5	1733.5	1685.1	1662.2	1662.2
15°	1705.3	1695.8	1639.4	1611.1	1605.7
17.5°	1673.0	1655.5	1588.3	1551.9	1545.2
20°	1636.7	1608.4	1533.1	1486.0	1478.0
22.5°	1596.3	1560.0	1472.6	1414.8	1405.4
25°	1554.6	1507.6	1408.0	1346.2	1328.7
27.5°	1507.6	1451.1	1342.1	1272.2	1250.7
30°	1456.5	1391.9	1272.2	1194.2	1171.4
32.5°	1404.0	1331.4	1200.9	1117.6	1092.0
35°	1347.5	1268.2	1128.3	1039.6	1011.3
37.5°	1291.0	1205.0	1057.0	964.2	934.7
40°	1231.9	1137.7	983.1	887.6	856.7
42.5°	1172.7	1071.8	910.5	813.6	781.3
45°	1109.5	1004.6	837.8	735.6	708.7
47.5°	1049.0	936.0	766.6	667.0	637.5
50°	981.7	864.7	696.6	597.1	570.2
52.5°	919.9	794.8	626.7	533.9	505.7
55°	854.0	724.9	558.1	469.3	442.5
57.5°	785.4	654.9	492.2	408.8	383.3
60°	718.1	585.0	427.7	351.0	338.9
62.5°	649.6	519.1	367.1	308.0	299.9
65°	576.9	450.5	306.6	271.7	266.3
67.5°	508.3	384.6	258.2	238.0	232.7
70°	438.4	318.7	221.9	204.4	201.7
72.5°	369.8	255.5	186.9	174.8	172.1
75°	299.9	199.0	154.7	145.2	143.9
77.5°	235.3	149.3	122.4	118.3	115.7
80°	174.8	111.6	94.1	91.4	90.1
82.5°	119.7	76.7	67.2	67.2	64.6
85°	68.6	47.1	41.7	43.0	41.7
87.5°	25.6	20.2	18.8	20.2	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)