

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
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-F-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

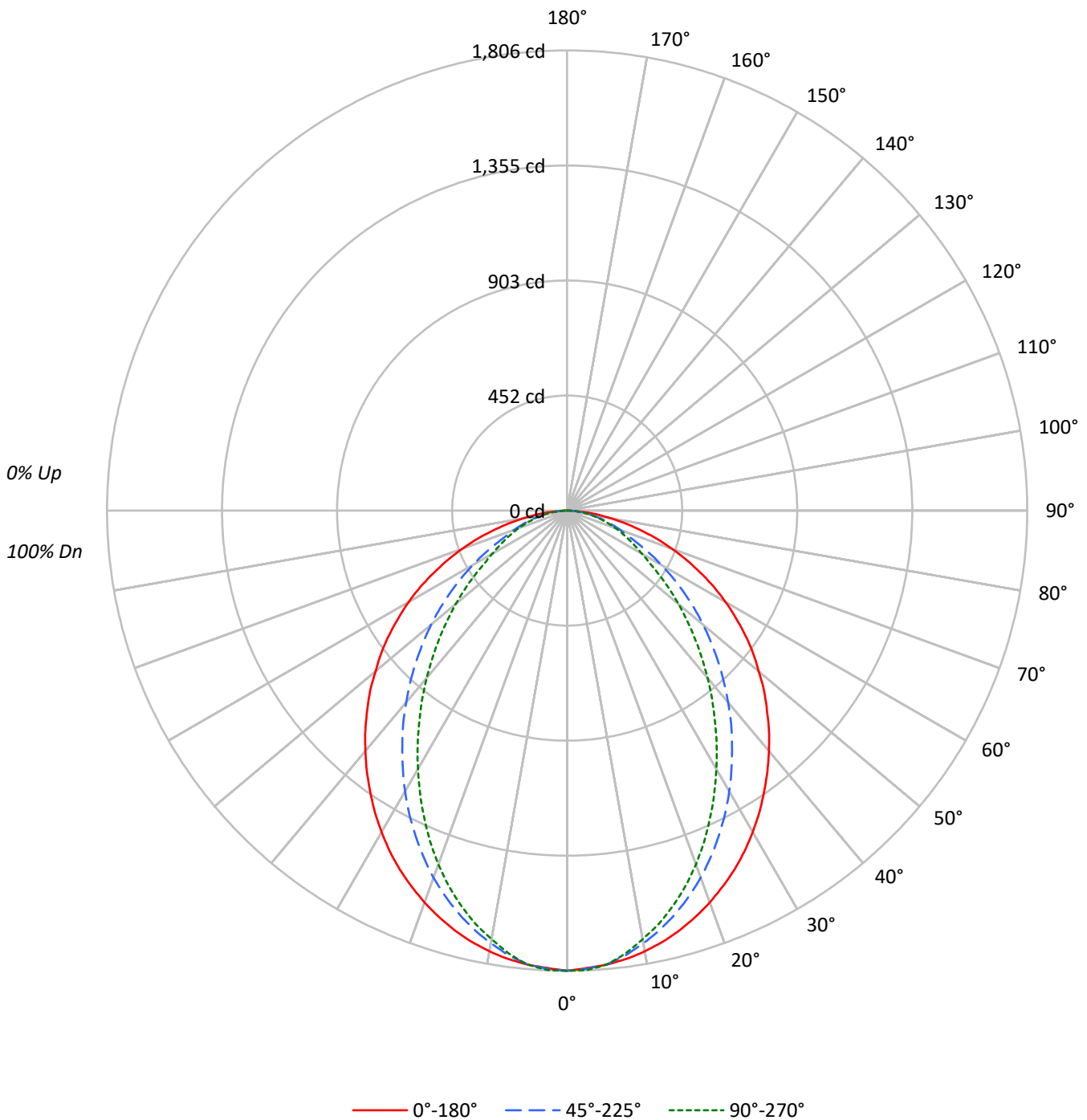
Lumens per Lamp: N/A
Luminaire Lumens: 3828.0 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	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	31	42	35	30	41	35	30	40	34	30	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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	20.14	21.68	20.50	21.99	22.30	16.52	18.06	16.88	18.37	18.69
	3H	21.92	23.31	22.30	23.63	23.99	18.00	19.38	18.37	19.71	20.07
	4H	22.58	23.87	22.98	24.22	24.60	18.59	19.88	18.98	20.23	20.61
	6H	23.05	24.25	23.46	24.62	25.01	19.05	20.25	19.46	20.62	21.01
	8H	23.21	24.35	23.63	24.74	25.14	19.21	20.35	19.63	20.74	21.14
	12H	23.30	24.40	23.73	24.78	25.21	19.32	20.42	19.75	20.80	21.23
4H	2H	20.27	21.57	20.67	21.92	22.30	17.20	18.49	17.60	18.84	19.22
	3H	22.24	23.32	22.65	23.72	24.12	18.87	19.95	19.28	20.35	20.75
	4H	22.99	23.96	23.42	24.38	24.81	19.58	20.55	20.01	20.96	21.40
	6H	23.58	24.43	24.04	24.87	25.33	20.16	21.01	20.62	21.45	21.91
	8H	23.79	24.58	24.25	25.02	25.49	20.37	21.16	20.83	21.61	22.07
	12H	23.94	24.64	24.42	25.12	25.59	20.53	21.24	21.01	21.72	22.19
8H	4H	23.05	23.84	23.51	24.29	24.75	19.94	20.73	20.40	21.18	21.64
	6H	23.71	24.37	24.21	24.86	25.33	20.64	21.30	21.14	21.79	22.27
	8H	23.96	24.55	24.48	25.06	25.55	20.93	21.52	21.44	22.02	22.51
	12H	24.17	24.69	24.68	25.18	25.75	21.17	21.69	21.68	22.18	22.74
12H	4H	23.04	23.75	23.52	24.23	24.70	19.99	20.70	20.47	21.17	21.65
	6H	23.70	24.29	24.22	24.80	25.29	20.71	21.30	21.23	21.81	22.30
	8H	24.00	24.52	24.51	25.01	25.58	21.06	21.58	21.57	22.07	22.63