

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: P1056406

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056406
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-S1270D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

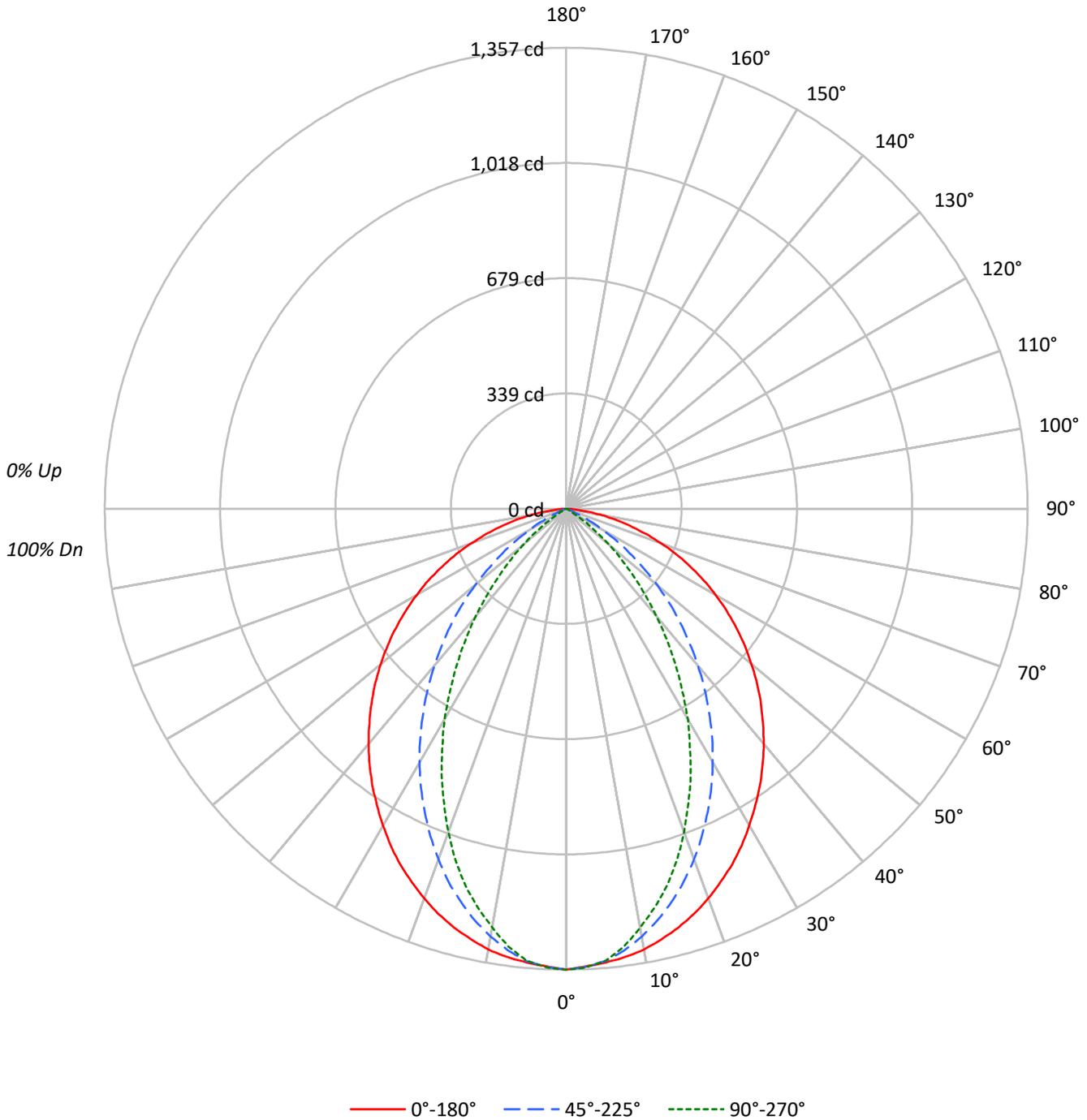
Lumens per Lamp: N/A
Luminaire Lumens: 2199.4 lumens
Efficiency: N/A
Efficacy: 52.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056406

CATALOG NUMBER: S125R3DR-S1270D940-X4F0-XX-UDD-FLL-B

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°	9592	9592	9592
5°	9515	9486	9476
10°	9460	9180	8987
15°	9341	8770	8395
20°	9186	8266	7619
25°	9011	7678	6756
30°	8793	7036	5841
35°	8577	6325	4829
40°	8340	5560	3822
45°	8094	4746	2769
50°	7824	3831	1789
55°	7526	2801	796
60°	7168	1731	228
65°	6726	631	135
70°	6087	223	56
75°	5291	74	36
80°	4051	53	0
85°	1857	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8094 cd/sqm



TEST NUMBER: P1056406

CATALOG NUMBER: S125R3DR-S1270D940-X4F0-XX-UDD-FLL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.0	5.7
10°-20°	338.4	15.4
20°-30°	457.8	20.8
30°-40°	470.3	21.4
40°-50°	389.6	17.7
50°-60°	250.2	11.4
60°-70°	120.8	5.5
70°-80°	40.9	1.9
80°-90°	5.2	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°	922.3	41.9
0°-40°	1392.6	63.3
0°-60°	2032.4	92.4
0°-90°	2199.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2199.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1341	1352	1337	1329	1335	127
15°	1276	1260	1198	1157	1147	360
25°	1155	1099	984	896	866	532
35°	994	898	733	605	560	621
45°	810	676	475	328	277	624
55°	611	448	227	100	65	546
65°	402	222	38	11	8	398
75°	194	42	3	1	1	205
85°	23	0	0	0	0	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.9	1356.9	1356.9	1356.9	1356.9
2.5°	1348.9	1359.6	1350.2	1348.9	1351.6
5°	1340.8	1351.6	1336.8	1328.7	1335.4
7.5°	1331.4	1336.8	1311.2	1297.8	1300.5
10°	1317.9	1316.6	1278.9	1256.1	1252.0
12.5°	1297.8	1291.0	1241.3	1209.0	1202.3
15°	1276.3	1260.1	1198.3	1156.6	1147.1
17.5°	1250.7	1225.1	1151.2	1097.4	1083.9
20°	1221.1	1186.1	1098.7	1032.8	1012.7
22.5°	1188.8	1144.5	1043.6	965.6	938.7
25°	1155.2	1098.7	984.4	895.7	866.1
27.5°	1117.6	1051.7	925.2	824.4	788.1
30°	1077.2	1001.9	862.0	751.8	715.5
32.5°	1035.5	952.1	798.8	679.1	634.8
35°	993.8	898.4	732.9	605.2	559.5
37.5°	949.5	844.6	668.4	535.2	485.5
40°	903.7	789.4	602.5	462.6	414.2
42.5°	856.7	732.9	536.6	394.0	344.3
45°	809.6	676.5	474.7	328.1	277.0
47.5°	761.2	618.6	410.2	263.6	219.2
50°	711.4	562.1	348.3	205.8	162.7
52.5°	661.7	504.3	285.1	149.3	110.3
55°	610.6	447.8	227.3	99.5	64.6
57.5°	559.5	390.0	173.5	55.1	24.2
60°	507.0	334.9	122.4	18.8	16.1
62.5°	455.9	275.7	76.7	14.8	12.1
65°	402.1	221.9	37.7	10.8	8.1
67.5°	349.7	170.8	16.1	6.7	4.0
70°	294.5	123.7	10.8	4.0	2.7
72.5°	243.4	79.3	6.7	2.7	1.3
75°	193.7	41.7	2.7	1.3	1.3
77.5°	145.2	17.5	1.3	1.3	1.3
80°	99.5	8.1	1.3	1.3	0.0
82.5°	59.2	2.7	1.3	1.3	0.0
85°	22.9	0.0	0.0	0.0	0.0
87.5°	1.3	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)