

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: P1056394

Luminaire Tested: S125R3DR-S1270D850-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056394
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-S1270D850-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

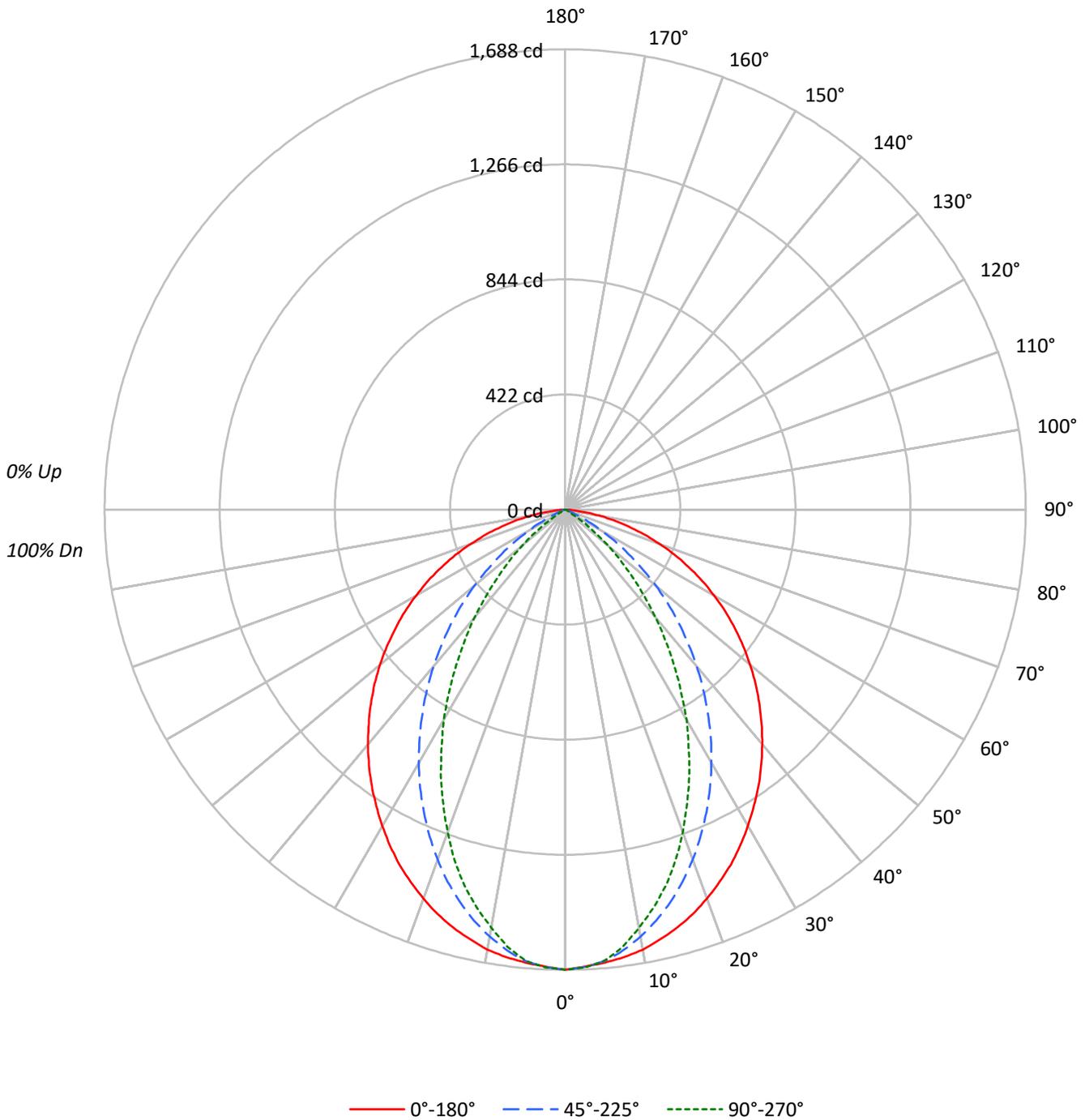
Lumens per Lamp: N/A
Luminaire Lumens: 2735.4 lumens
Efficiency: N/A
Efficacy: 65.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1056394

CATALOG NUMBER: S125R3DR-S1270D850-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°	11930	11930	11930
5°	11833	11798	11786
10°	11766	11418	11177
15°	11616	10906	10442
20°	11425	10280	9475
25°	11206	9550	8402
30°	10936	8752	7263
35°	10667	7866	6005
40°	10373	6915	4754
45°	10067	5903	3444
50°	9731	4764	2226
55°	9358	3484	990
60°	8914	2152	284
65°	8365	783	167
70°	7571	277	68
75°	6577	90	46
80°	5040	69	0
85°	2304	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10067 cd/sqm



TEST NUMBER: P1056394

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.7	5.7
10°-20°	420.9	15.4
20°-30°	569.4	20.8
30°-40°	584.9	21.4
40°-50°	484.6	17.7
50°-60°	311.1	11.4
60°-70°	150.3	5.5
70°-80°	50.8	1.9
80°-90°	6.5	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°	1147.0	41.9
0°-40°	1732.0	63.3
0°-60°	2527.7	92.4
0°-90°	2735.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2735.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1688	1688	1688	1688	1688	
5°	1668	1681	1662	1652	1661	158
15°	1587	1567	1490	1438	1427	447
25°	1437	1366	1224	1114	1077	661
35°	1236	1117	912	753	696	773
45°	1007	841	590	408	344	776
55°	759	557	283	124	80	679
65°	500	276	47	13	10	495
75°	241	52	3	2	2	255
85°	28	0	0	0	0	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1687.6	1687.6	1687.6	1687.6	1687.6
2.5°	1677.6	1690.9	1679.2	1677.6	1680.9
5°	1667.5	1680.9	1662.5	1652.5	1660.8
7.5°	1655.8	1662.5	1630.7	1614.0	1617.4
10°	1639.1	1637.4	1590.6	1562.2	1557.1
12.5°	1614.0	1605.6	1543.8	1503.6	1495.3
15°	1587.2	1567.2	1490.2	1438.4	1426.7
17.5°	1555.5	1523.7	1431.7	1364.8	1348.1
20°	1518.7	1475.2	1366.5	1284.5	1259.4
22.5°	1478.5	1423.3	1297.9	1200.9	1167.4
25°	1436.7	1366.5	1224.3	1113.9	1077.1
27.5°	1389.9	1307.9	1150.7	1025.3	980.1
30°	1339.7	1246.0	1072.1	935.0	889.8
32.5°	1287.9	1184.2	993.5	844.6	789.4
35°	1236.0	1117.3	911.5	752.6	695.8
37.5°	1180.8	1050.4	831.3	665.7	603.8
40°	1124.0	981.8	749.3	575.4	515.1
42.5°	1065.4	911.5	667.3	490.1	428.2
45°	1006.9	841.3	590.4	408.1	344.5
47.5°	946.7	769.4	510.1	327.8	272.6
50°	884.8	699.1	433.2	255.9	202.4
52.5°	822.9	627.2	354.6	185.7	137.1
55°	759.3	557.0	282.7	123.8	80.3
57.5°	695.8	485.0	215.8	68.6	30.1
60°	630.5	416.5	152.2	23.4	20.1
62.5°	567.0	342.9	95.3	18.4	15.1
65°	500.1	276.0	46.8	13.4	10.0
67.5°	434.9	212.4	20.1	8.4	5.0
70°	366.3	153.9	13.4	5.0	3.3
72.5°	302.7	98.7	8.4	3.3	1.7
75°	240.8	51.8	3.3	1.7	1.7
77.5°	180.6	21.7	1.7	1.7	1.7
80°	123.8	10.0	1.7	1.7	0.0
82.5°	73.6	3.3	1.7	1.7	0.0
85°	28.4	0.0	0.0	0.0	0.0
87.5°	1.7	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)