

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: P1056477

Luminaire Tested: S125R3DR-S850D850-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056477
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-S850D850-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

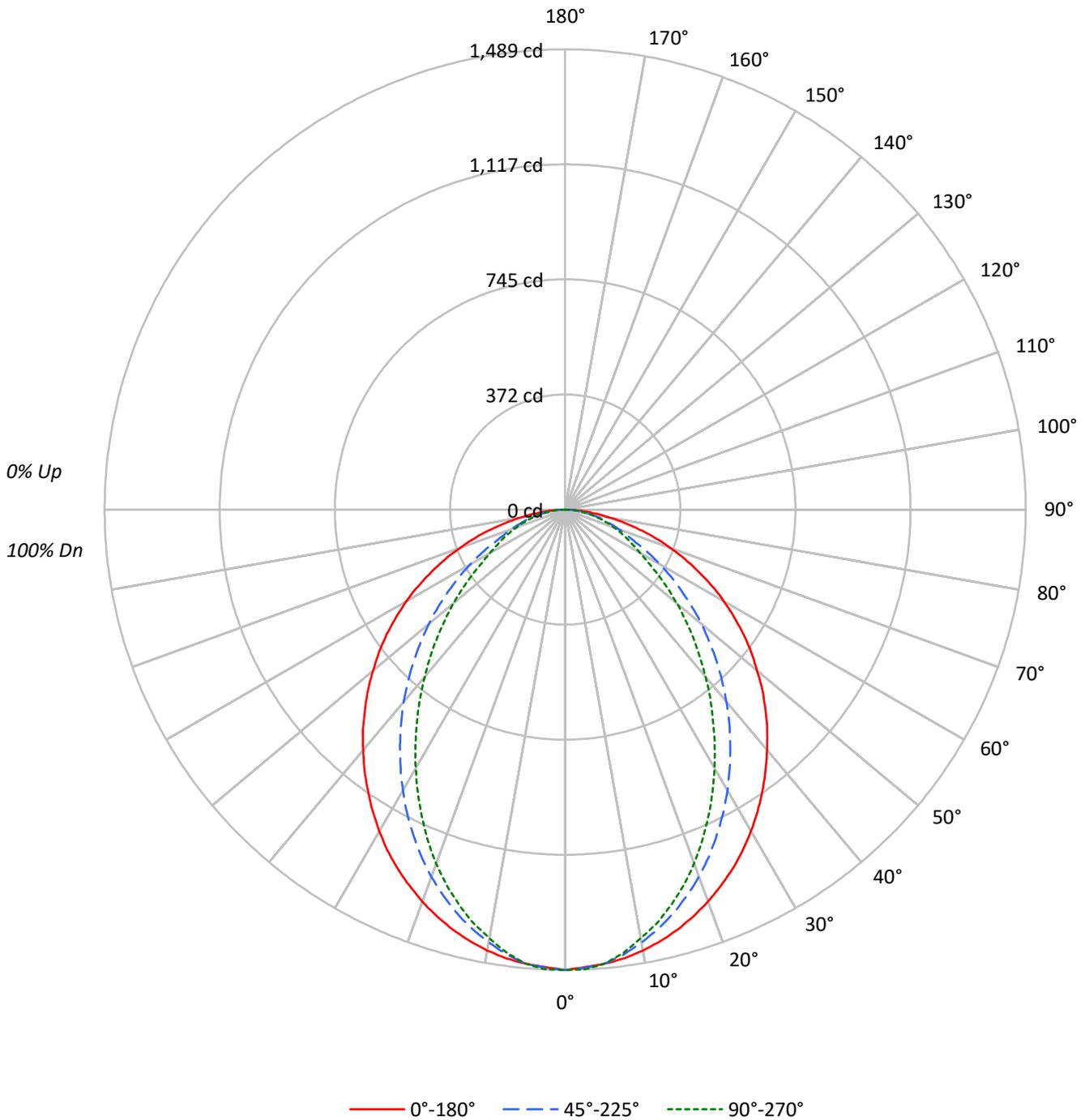
Lumens per Lamp: N/A
Luminaire Lumens: 3156.7 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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°	10529	10529	10529
5°	10467	10459	10467
10°	10397	10206	10110
15°	10292	9894	9691
20°	10154	9511	9169
25°	10000	9057	8547
30°	9804	8564	7885
35°	9590	8030	7197
40°	9374	7481	6519
45°	9147	6907	5843
50°	8904	6318	5171
55°	8679	5672	4497
60°	8373	4987	3952
65°	7959	4230	3673
70°	7472	3782	3439
75°	6755	3483	3242
80°	5870	3159	3025
85°	4591	2790	2790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9147 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.4	4.4
10°-20°	382.6	12.1
20°-30°	540.5	17.1
30°-40°	595.0	18.8
40°-50°	555.0	17.6
50°-60°	443.1	14.0
60°-70°	298.2	9.4
70°-80°	158.8	5.0
80°-90°	44.1	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°	1062.5	33.7
0°-40°	1657.5	52.5
0°-60°	2655.6	84.1
0°-90°	3156.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3156.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1475	1487	1474	1469	1475	140
15°	1406	1398	1352	1329	1324	396
25°	1282	1243	1161	1110	1096	590
35°	1111	1046	930	857	834	695
45°	915	828	691	607	584	706
55°	704	598	460	387	365	629
65°	476	372	253	224	220	472
75°	247	164	128	120	119	263
85°	57	39	34	36	34	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1489.4	1489.4	1489.4	1489.4	1489.4
2.5°	1481.6	1493.8	1483.8	1486.1	1488.3
5°	1475.0	1487.2	1473.9	1469.4	1475.0
7.5°	1463.9	1473.9	1451.7	1441.7	1446.1
10°	1448.4	1455.0	1421.7	1408.4	1408.4
12.5°	1429.5	1429.5	1389.6	1370.7	1370.7
15°	1406.2	1398.4	1351.9	1328.6	1324.1
17.5°	1379.6	1365.2	1309.7	1279.8	1274.2
20°	1349.7	1326.4	1264.3	1225.4	1218.8
22.5°	1316.4	1286.4	1214.4	1166.7	1158.9
25°	1282.0	1243.2	1161.1	1110.1	1095.7
27.5°	1243.2	1196.6	1106.8	1049.1	1031.4
30°	1201.0	1147.8	1049.1	984.8	965.9
32.5°	1157.8	1097.9	990.3	921.6	900.5
35°	1111.2	1045.8	930.5	857.3	834.0
37.5°	1064.6	993.7	871.7	795.2	770.8
40°	1015.8	938.2	810.7	731.9	706.4
42.5°	967.0	883.9	750.8	670.9	644.3
45°	914.9	828.4	690.9	606.6	584.4
47.5°	865.0	771.9	632.1	550.1	525.7
50°	809.6	713.1	574.5	492.4	470.2
52.5°	758.6	655.4	516.8	440.3	417.0
55°	704.2	597.8	460.2	387.0	364.9
57.5°	647.7	540.1	405.9	337.1	316.1
60°	592.2	482.4	352.7	289.4	279.5
62.5°	535.6	428.1	302.8	254.0	247.3
65°	475.8	371.5	252.9	224.0	219.6
67.5°	419.2	317.2	212.9	196.3	191.9
70°	361.5	262.8	183.0	168.6	166.4
72.5°	305.0	210.7	154.2	144.2	142.0
75°	247.3	164.1	127.5	119.8	118.7
77.5°	194.1	123.1	100.9	97.6	95.4
80°	144.2	92.0	77.6	75.4	74.3
82.5°	98.7	63.2	55.5	55.5	53.2
85°	56.6	38.8	34.4	35.5	34.4
87.5°	21.1	16.6	15.5	16.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)