

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: P1056468

Luminaire Tested: S125R3DR-S850D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056468
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-S850D830-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

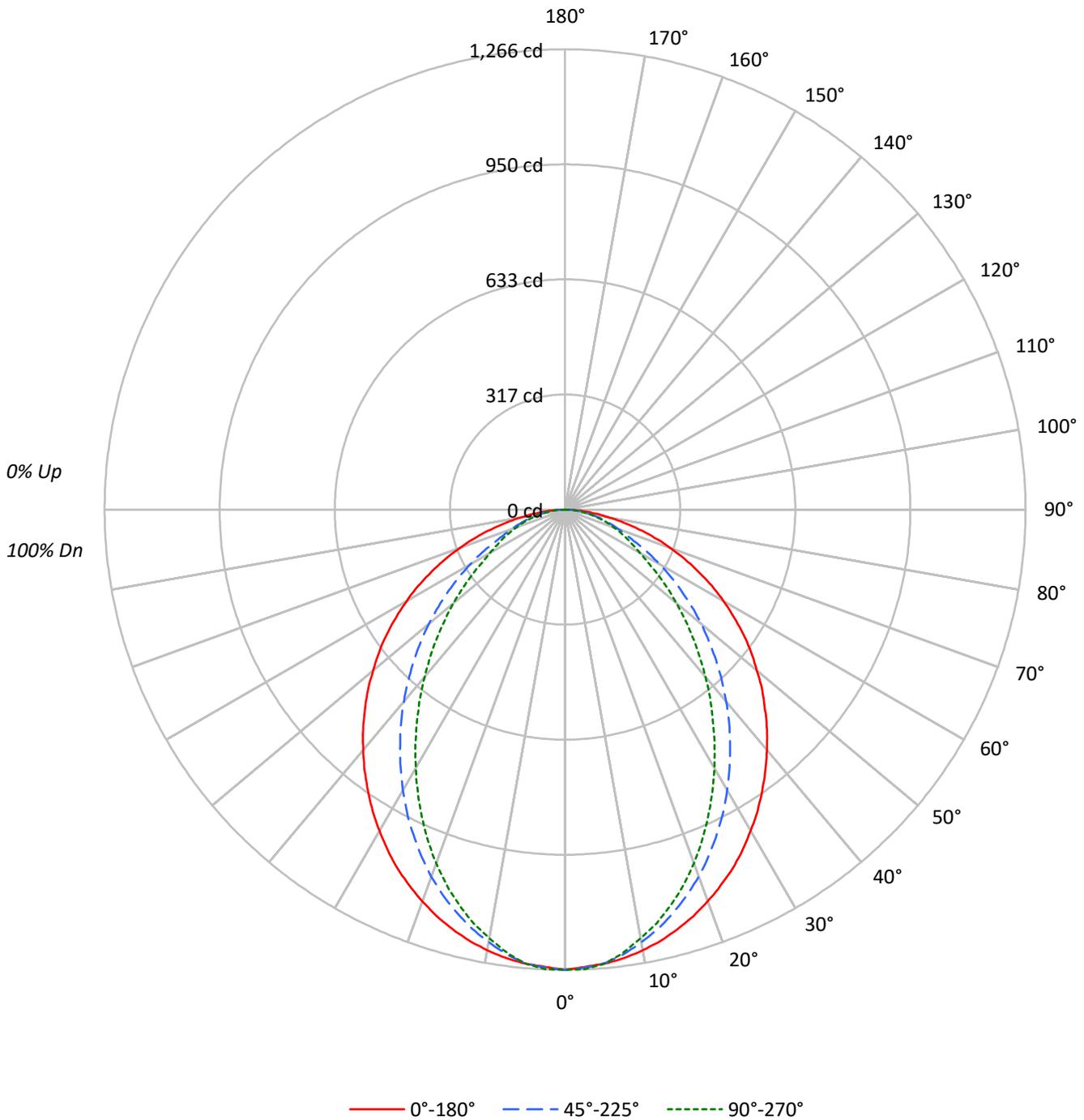
Lumens per Lamp: N/A
Luminaire Lumens: 2682.9 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8948	8948	8948
5°	8896	8889	8896
10°	8837	8674	8593
15°	8747	8409	8236
20°	8630	8083	7793
25°	8499	7697	7264
30°	8333	7278	6702
35°	8150	6825	6117
40°	7968	6358	5541
45°	7774	5871	4966
50°	7568	5369	4395
55°	7377	4822	3822
60°	7116	4237	3358
65°	6765	3595	3121
70°	6352	3214	2923
75°	5741	2961	2756
80°	4987	2687	2573
85°	3901	2368	2368

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7774 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	4.4
10°-20°	325.2	12.1
20°-30°	459.4	17.1
30°-40°	505.7	18.8
40°-50°	471.7	17.6
50°-60°	376.6	14.0
60°-70°	253.4	9.4
70°-80°	135.0	5.0
80°-90°	37.5	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°	903.0	33.7
0°-40°	1408.7	52.5
0°-60°	2257.0	84.1
0°-90°	2682.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2682.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1254	1264	1253	1249	1254	119
15°	1195	1188	1149	1129	1125	337
25°	1090	1057	987	944	931	502
35°	944	889	791	729	709	591
45°	778	704	587	516	497	600
55°	598	508	391	329	310	534
65°	404	316	215	190	187	401
75°	210	140	108	102	101	224
85°	48	33	29	30	29	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1265.8	1265.8	1265.8	1265.8	1265.8
2.5°	1259.2	1269.6	1261.1	1263.0	1264.9
5°	1253.6	1263.9	1252.6	1248.9	1253.6
7.5°	1244.2	1252.6	1233.8	1225.3	1229.1
10°	1231.0	1236.6	1208.3	1197.0	1197.0
12.5°	1214.9	1214.9	1181.0	1165.0	1165.0
15°	1195.1	1188.5	1149.0	1129.2	1125.4
17.5°	1172.5	1160.3	1113.1	1087.7	1083.0
20°	1147.1	1127.3	1074.5	1041.5	1035.9
22.5°	1118.8	1093.3	1032.1	991.6	985.0
25°	1089.6	1056.6	986.8	943.5	931.2
27.5°	1056.6	1017.0	940.7	891.6	876.6
30°	1020.8	975.5	891.6	837.0	821.0
32.5°	984.0	933.1	841.7	783.3	765.3
35°	944.4	888.8	790.8	728.6	708.8
37.5°	904.8	844.5	740.8	675.8	655.1
40°	863.4	797.4	689.0	622.1	600.4
42.5°	821.9	751.2	638.1	570.2	547.6
45°	777.6	704.1	587.2	515.6	496.7
47.5°	735.2	656.0	537.2	467.5	446.8
50°	688.1	606.1	488.2	418.5	399.6
52.5°	644.7	557.0	439.2	374.2	354.4
55°	598.5	508.0	391.2	328.9	310.1
57.5°	550.4	459.0	345.0	286.5	268.6
60°	503.3	410.0	299.7	246.0	237.5
62.5°	455.2	363.8	257.3	215.8	210.2
65°	404.4	315.8	214.9	190.4	186.6
67.5°	356.3	269.6	181.0	166.8	163.1
70°	307.3	223.4	155.5	143.3	141.4
72.5°	259.2	179.1	131.0	122.5	120.6
75°	210.2	139.5	108.4	101.8	100.9
77.5°	164.9	104.6	85.8	82.9	81.1
80°	122.5	78.2	66.0	64.1	63.2
82.5°	83.9	53.7	47.1	47.1	45.2
85°	48.1	33.0	29.2	30.2	29.2
87.5°	17.9	14.1	13.2	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)