

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: P1056489

Luminaire Tested: S125R3DR-S850D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056489
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-S850D940-X4F0-XX-UDD-FLL-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

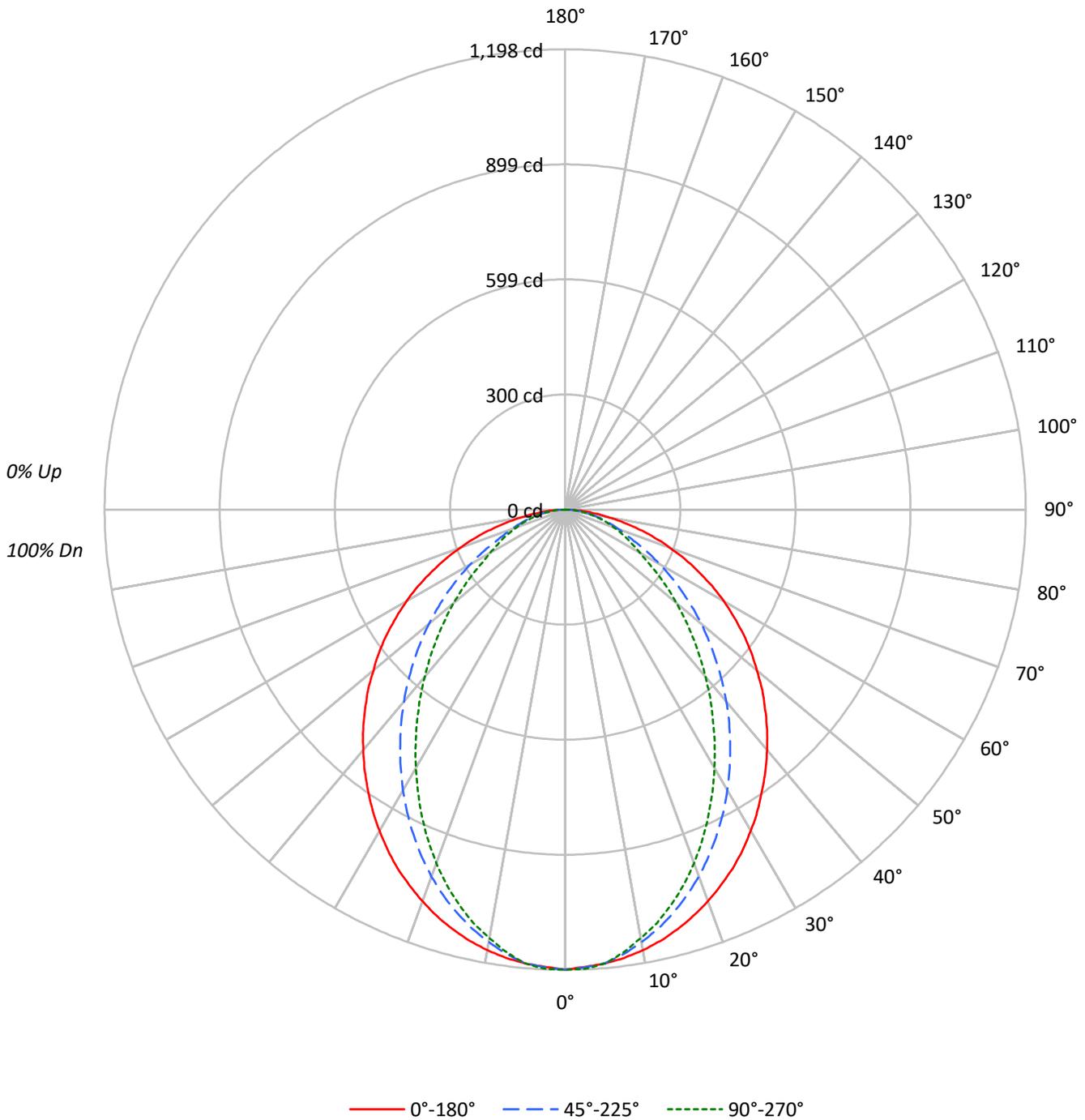
Lumens per Lamp: N/A
Luminaire Lumens: 2538.2 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	8466	8466	8466
5°	8416	8410	8416
10°	8360	8206	8130
15°	8275	7955	7792
20°	8164	7648	7373
25°	8040	7282	6872
30°	7883	6886	6340
35°	7711	6456	5787
40°	7538	6015	5242
45°	7355	5554	4698
50°	7159	5080	4158
55°	6978	4561	3616
60°	6733	4010	3177
65°	6398	3401	2954
70°	6009	3040	2766
75°	5433	2800	2606
80°	4718	2540	2430
85°	3691	2239	2239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7355 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	4.4
10°-20°	307.7	12.1
20°-30°	434.6	17.1
30°-40°	478.4	18.8
40°-50°	446.3	17.6
50°-60°	356.3	14.0
60°-70°	239.7	9.4
70°-80°	127.7	5.0
80°-90°	35.5	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°	854.3	33.7
0°-40°	1332.7	52.5
0°-60°	2135.3	84.1
0°-90°	2538.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2538.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1186	1196	1185	1182	1186	113
15°	1131	1124	1087	1068	1065	319
25°	1031	1000	934	893	881	474
35°	894	841	748	689	671	559
45°	736	666	556	488	470	568
55°	566	481	370	311	293	505
65°	382	299	203	180	177	379
75°	199	132	102	96	95	212
85°	46	31	28	28	28	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1197.6	1197.6	1197.6	1197.6	1197.6
2.5°	1191.3	1201.1	1193.1	1194.9	1196.7
5°	1186.0	1195.8	1185.1	1181.5	1186.0
7.5°	1177.1	1185.1	1167.2	1159.2	1162.8
10°	1164.6	1169.9	1143.2	1132.5	1132.5
12.5°	1149.4	1149.4	1117.3	1102.2	1102.2
15°	1130.7	1124.4	1087.0	1068.3	1064.7
17.5°	1109.3	1097.7	1053.1	1029.0	1024.6
20°	1085.2	1066.5	1016.6	985.3	980.0
22.5°	1058.5	1034.4	976.4	938.1	931.8
25°	1030.8	999.6	933.6	892.6	881.0
27.5°	999.6	962.2	889.9	843.6	829.3
30°	965.7	922.9	843.6	791.8	776.7
32.5°	930.9	882.8	796.3	741.0	724.1
35°	893.5	840.9	748.1	689.3	670.6
37.5°	856.0	799.0	700.9	639.4	619.7
40°	816.8	754.4	651.8	588.5	568.0
42.5°	777.6	710.7	603.7	539.5	518.1
45°	735.7	666.1	555.5	487.8	469.9
47.5°	695.5	620.6	508.3	442.3	422.7
50°	650.9	573.4	461.9	395.9	378.1
52.5°	609.9	527.0	415.5	354.0	335.3
55°	566.2	480.6	370.1	311.2	293.4
57.5°	520.8	434.3	326.4	271.1	254.1
60°	476.2	387.9	283.6	232.7	224.7
62.5°	430.7	344.2	243.4	204.2	198.9
65°	382.5	298.7	203.3	180.1	176.6
67.5°	337.1	255.0	171.2	157.8	154.3
70°	290.7	211.3	147.1	135.5	133.8
72.5°	245.2	169.4	123.9	115.9	114.1
75°	198.9	132.0	102.5	96.3	95.4
77.5°	156.0	99.0	81.1	78.5	76.7
80°	115.9	74.0	62.4	60.6	59.7
82.5°	79.4	50.8	44.6	44.6	42.8
85°	45.5	31.2	27.6	28.5	27.6
87.5°	16.9	13.4	12.5	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)