

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: P1056476

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056476
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
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-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

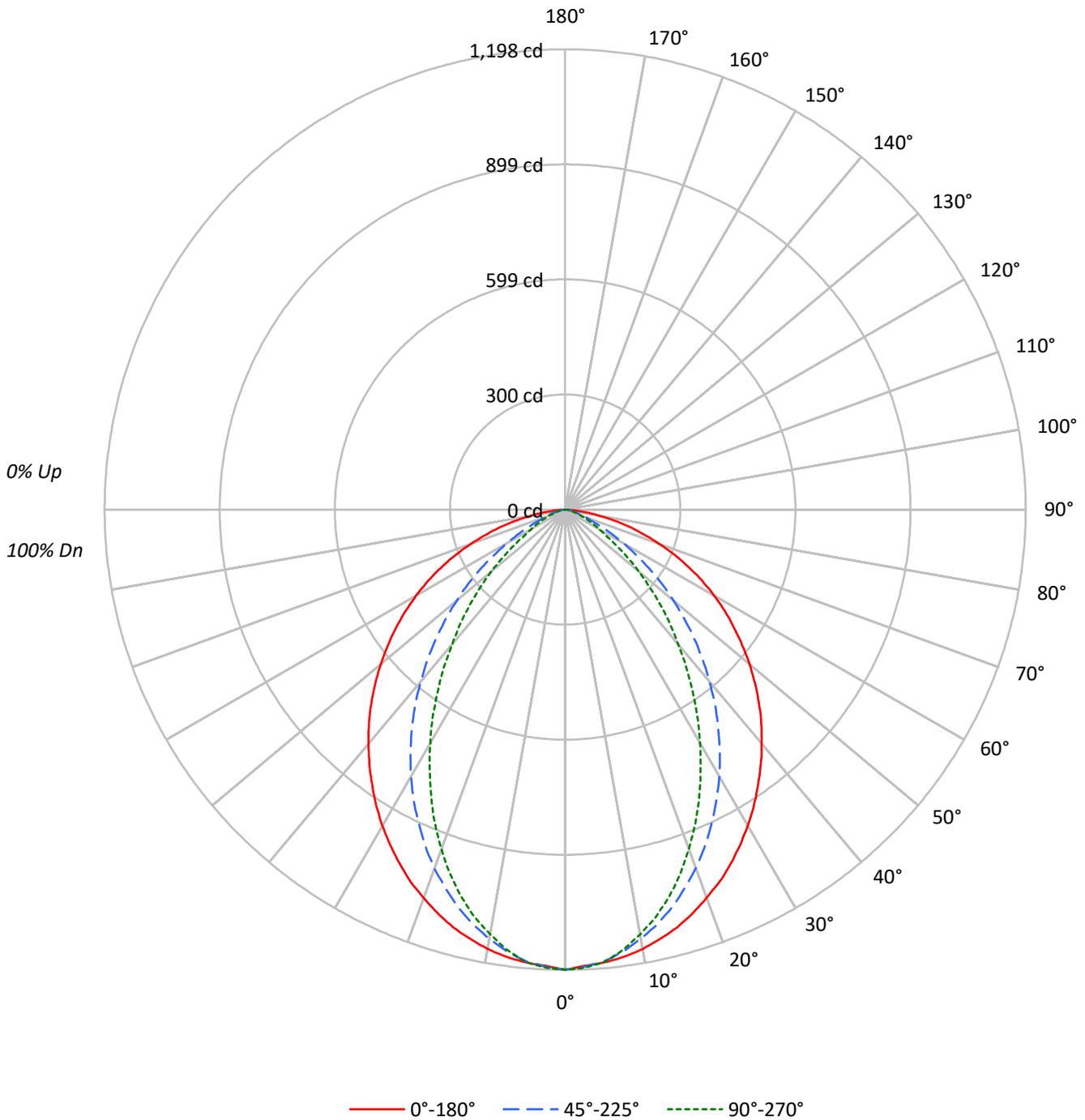
Lumens per Lamp: N/A
Luminaire Lumens: 2164.8 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8467	8467	8467
5°	8397	8374	8389
10°	8335	8144	8056
15°	8238	7849	7638
20°	8093	7476	7075
25°	7941	7033	6436
30°	7758	6545	5730
35°	7551	5991	4986
40°	7338	5383	4216
45°	7129	4746	3492
50°	6879	4037	2744
55°	6616	3281	1995
60°	6319	2446	1427
65°	5937	1614	1112
70°	5364	1122	779
75°	4665	727	606
80°	3656	541	497
85°	1890	446	357

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7129 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.6	5.2
10°-20°	303.3	14.0
20°-30°	419.4	19.4
30°-40°	444.3	20.5
40°-50°	387.8	17.9
50°-60°	275.8	12.7
60°-70°	153.4	7.1
70°-80°	59.0	2.7
80°-90°	10.2	0.5
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°	834.2	38.5
0°-40°	1278.6	59.1
0°-60°	1942.2	89.7
0°-90°	2164.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2164.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1183	1192	1180	1177	1182	112
15°	1126	1116	1072	1049	1044	317
25°	1018	984	902	846	825	469
35°	875	815	694	610	578	547
45°	713	628	475	379	349	550
55°	537	430	266	184	162	480
65°	355	233	96	71	66	351
75°	171	66	27	22	22	181
85°	23	7	6	4	4	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1197.7	1197.7	1197.7	1197.7	1197.7
2.5°	1188.8	1201.0	1191.1	1192.2	1193.3
5°	1183.3	1192.2	1180.0	1176.6	1182.2
7.5°	1174.4	1181.1	1160.0	1152.3	1155.6
10°	1161.1	1163.3	1134.5	1123.4	1122.3
12.5°	1144.5	1141.2	1105.7	1087.9	1086.8
15°	1125.6	1115.7	1072.4	1049.1	1043.6
17.5°	1102.3	1086.8	1033.6	1003.6	994.8
20°	1075.7	1054.7	993.7	954.8	940.4
22.5°	1049.1	1020.3	949.3	900.5	885.0
25°	1018.1	983.7	901.6	846.2	825.1
27.5°	984.8	943.8	852.8	788.5	763.0
30°	950.4	902.7	801.8	729.7	702.0
32.5°	913.8	859.5	748.6	669.8	641.0
35°	875.0	815.1	694.2	609.9	577.8
37.5°	836.2	769.6	641.0	551.2	517.9
40°	795.2	723.1	583.3	491.3	456.9
42.5°	755.2	675.4	529.0	434.7	403.7
45°	713.1	627.7	474.7	379.3	349.3
47.5°	669.8	577.8	420.3	327.2	297.2
50°	625.5	529.0	367.1	276.1	249.5
52.5°	581.1	480.2	317.2	227.3	204.1
55°	536.8	430.3	266.2	184.1	161.9
57.5°	492.4	381.5	218.5	144.2	124.2
60°	446.9	331.6	173.0	106.5	100.9
62.5°	401.5	282.8	134.2	87.6	83.2
65°	354.9	232.9	96.5	71.0	66.5
67.5°	308.3	187.4	69.9	54.3	51.0
70°	259.5	143.1	54.3	41.0	37.7
72.5°	212.9	103.1	38.8	29.9	28.8
75°	170.8	66.5	26.6	22.2	22.2
77.5°	128.6	39.9	18.9	16.6	16.6
80°	89.8	23.3	13.3	12.2	12.2
82.5°	54.3	12.2	8.9	7.8	7.8
85°	23.3	6.7	5.5	4.4	4.4
87.5°	4.4	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)