

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: P1056482

Luminaire Tested: S125R3DR-S850D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056482
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-S850D930-X4F0-XX-UDD-FLL-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

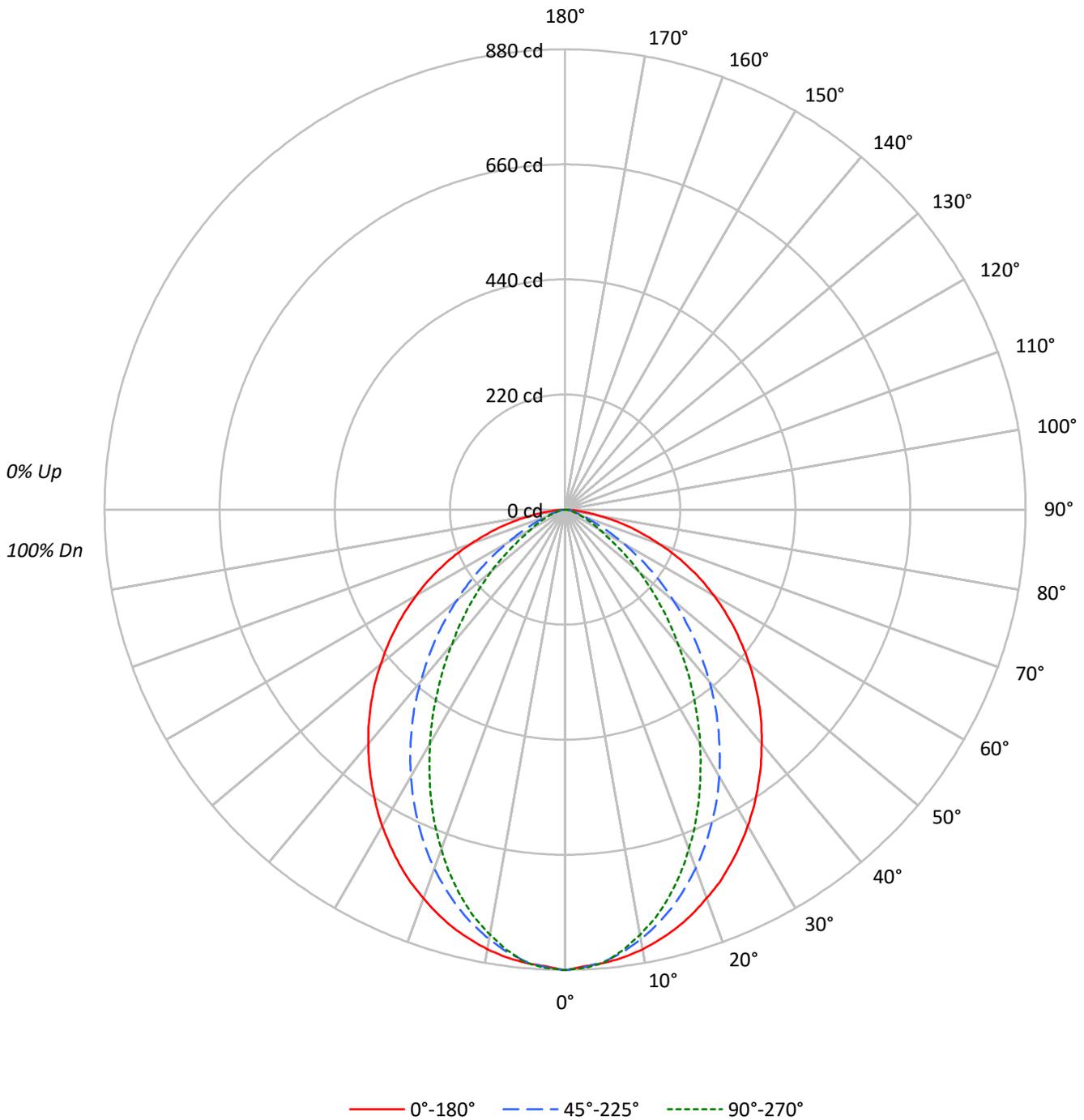
Lumens per Lamp: N/A
Luminaire Lumens: 1591.5 lumens
Efficiency: N/A
Efficacy: 60.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6225	6225	6225
5°	6173	6156	6167
10°	6127	5987	5923
15°	6056	5770	5615
20°	5949	5496	5201
25°	5838	5170	4732
30°	5703	4812	4213
35°	5552	4405	3666
40°	5395	3957	3100
45°	5241	3488	2567
50°	5057	2968	2017
55°	4863	2412	1467
60°	4646	1798	1049
65°	4364	1186	818
70°	3944	825	573
75°	3431	535	445
80°	2687	399	366
85°	1387	333	268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5241 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.0	5.2
10°-20°	223.0	14.0
20°-30°	308.3	19.4
30°-40°	326.7	20.5
40°-50°	285.1	17.9
50°-60°	202.8	12.7
60°-70°	112.8	7.1
70°-80°	43.4	2.7
80°-90°	7.5	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°	613.3	38.5
0°-40°	940.0	59.1
0°-60°	1427.8	89.7
0°-90°	1591.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1591.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	870	876	868	865	869	83
15°	828	820	788	771	767	233
25°	748	723	663	622	607	345
35°	643	599	510	448	425	402
45°	524	462	349	279	257	404
55°	395	316	196	135	119	353
65°	261	171	71	52	49	258
75°	126	49	20	16	16	133
85°	17	5	4	3	3	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	880.5	880.5	880.5	880.5	880.5
2.5°	874.0	883.0	875.6	876.4	877.3
5°	869.9	876.4	867.5	865.0	869.1
7.5°	863.4	868.3	852.8	847.1	849.5
10°	853.6	855.2	834.1	825.9	825.1
12.5°	841.4	838.9	812.9	799.8	799.0
15°	827.5	820.2	788.4	771.3	767.2
17.5°	810.4	799.0	759.9	737.8	731.3
20°	790.8	775.3	730.5	702.0	691.4
22.5°	771.3	750.1	697.9	662.0	650.6
25°	748.4	723.2	662.8	622.1	606.6
27.5°	724.0	693.8	627.0	579.7	560.9
30°	698.7	663.7	589.5	536.5	516.1
32.5°	671.8	631.9	550.3	492.4	471.2
35°	643.3	599.2	510.4	448.4	424.8
37.5°	614.7	565.8	471.2	405.2	380.7
40°	584.6	531.6	428.8	361.2	335.9
42.5°	555.2	496.5	388.9	319.6	296.8
45°	524.2	461.5	348.9	278.8	256.8
47.5°	492.4	424.8	309.0	240.5	218.5
50°	459.8	388.9	269.9	203.0	183.4
52.5°	427.2	353.0	233.2	167.1	150.0
55°	394.6	316.3	195.7	135.3	119.0
57.5°	362.0	280.5	160.6	106.0	91.3
60°	328.6	243.8	127.2	78.3	74.2
62.5°	295.1	207.9	98.7	64.4	61.1
65°	260.9	171.2	70.9	52.2	48.9
67.5°	226.7	137.8	51.4	39.9	37.5
70°	190.8	105.2	39.9	30.2	27.7
72.5°	156.5	75.8	28.5	22.0	21.2
75°	125.6	48.9	19.6	16.3	16.3
77.5°	94.6	29.4	13.9	12.2	12.2
80°	66.0	17.1	9.8	9.0	9.0
82.5°	39.9	9.0	6.5	5.7	5.7
85°	17.1	4.9	4.1	3.3	3.3
87.5°	3.3	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)