

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: P1056466

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)
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-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

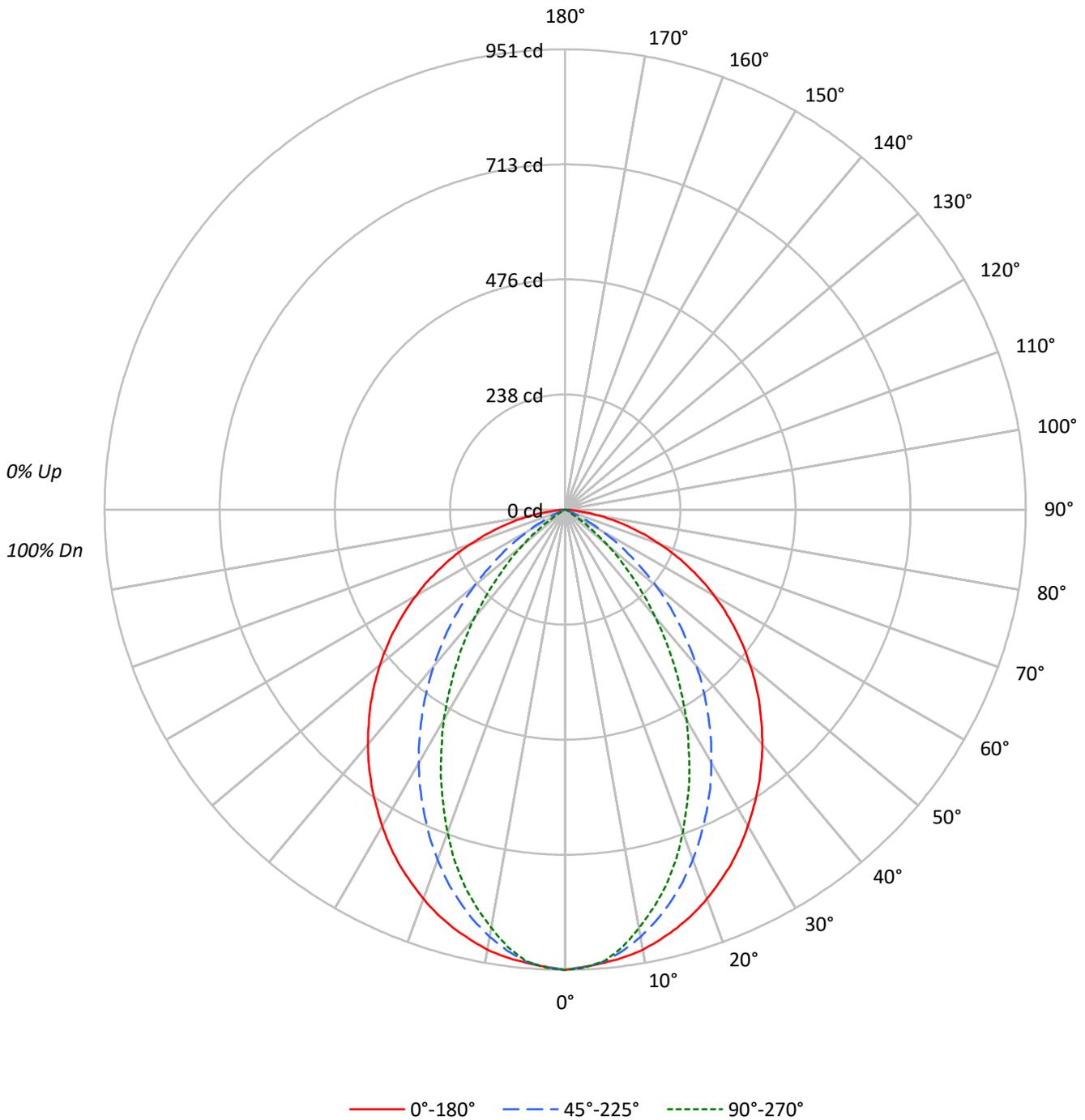
Lumens per Lamp: N/A
Luminaire Lumens: 1541.4 lumens
Efficiency: N/A
Efficacy: 58.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6723	6723	6723
5°	6668	6649	6641
10°	6631	6435	6299
15°	6547	6146	5884
20°	6438	5793	5339
25°	6315	5381	4735
30°	6163	4932	4093
35°	6011	4433	3384
40°	5845	3897	2679
45°	5673	3326	1942
50°	5484	2685	1254
55°	5274	1963	557
60°	5023	1213	160
65°	4714	442	95
70°	4266	155	39
75°	3706	52	25
80°	2838	37	0
85°	1298	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5673 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	5.7
10°-20°	237.2	15.4
20°-30°	320.9	20.8
30°-40°	329.6	21.4
40°-50°	273.1	17.7
50°-60°	175.3	11.4
60°-70°	84.7	5.5
70°-80°	28.6	1.9
80°-90°	3.7	0.2
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°	646.4	41.9
0°-40°	976.0	63.3
0°-60°	1424.4	92.4
0°-90°	1541.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1541.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	951	951	951	951	951	
5°	940	947	937	931	936	89
15°	894	883	840	811	804	252
25°	810	770	690	628	607	373
35°	696	630	514	424	392	435
45°	567	474	333	230	194	438
55°	428	314	159	70	45	382
65°	282	156	26	8	6	279
75°	136	29	2	1	1	144
85°	16	0	0	0	0	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	951.0	951.0	951.0	951.0	951.0
2.5°	945.4	952.9	946.3	945.4	947.3
5°	939.7	947.3	936.9	931.2	935.9
7.5°	933.1	936.9	919.0	909.6	911.4
10°	923.7	922.8	896.4	880.3	877.5
12.5°	909.6	904.8	870.0	847.3	842.6
15°	894.5	883.2	839.8	810.6	804.0
17.5°	876.6	858.7	806.8	769.1	759.7
20°	855.8	831.3	770.1	723.9	709.7
22.5°	833.2	802.1	731.4	676.7	657.9
25°	809.6	770.1	689.9	627.7	607.0
27.5°	783.3	737.1	648.5	577.8	552.3
30°	755.0	702.2	604.2	526.9	501.4
32.5°	725.8	667.3	559.9	476.0	444.9
35°	696.5	629.6	513.7	424.1	392.1
37.5°	665.4	591.9	468.4	375.1	340.3
40°	633.4	553.3	422.3	324.2	290.3
42.5°	600.4	513.7	376.1	276.2	241.3
45°	567.4	474.1	332.7	230.0	194.2
47.5°	533.5	433.6	287.5	184.7	153.6
50°	498.6	394.0	244.1	144.2	114.0
52.5°	463.7	353.5	199.8	104.6	77.3
55°	427.9	313.9	159.3	69.7	45.2
57.5°	392.1	273.3	121.6	38.6	17.0
60°	355.3	234.7	85.8	13.2	11.3
62.5°	319.5	193.2	53.7	10.4	8.5
65°	281.8	155.5	26.4	7.5	5.7
67.5°	245.1	119.7	11.3	4.7	2.8
70°	206.4	86.7	7.5	2.8	1.9
72.5°	170.6	55.6	4.7	1.9	0.9
75°	135.7	29.2	1.9	0.9	0.9
77.5°	101.8	12.3	0.9	0.9	0.9
80°	69.7	5.7	0.9	0.9	0.0
82.5°	41.5	1.9	0.9	0.9	0.0
85°	16.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)