

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: P1056472

Luminaire Tested: S125R3DR-S850D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056472
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-S850D840-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

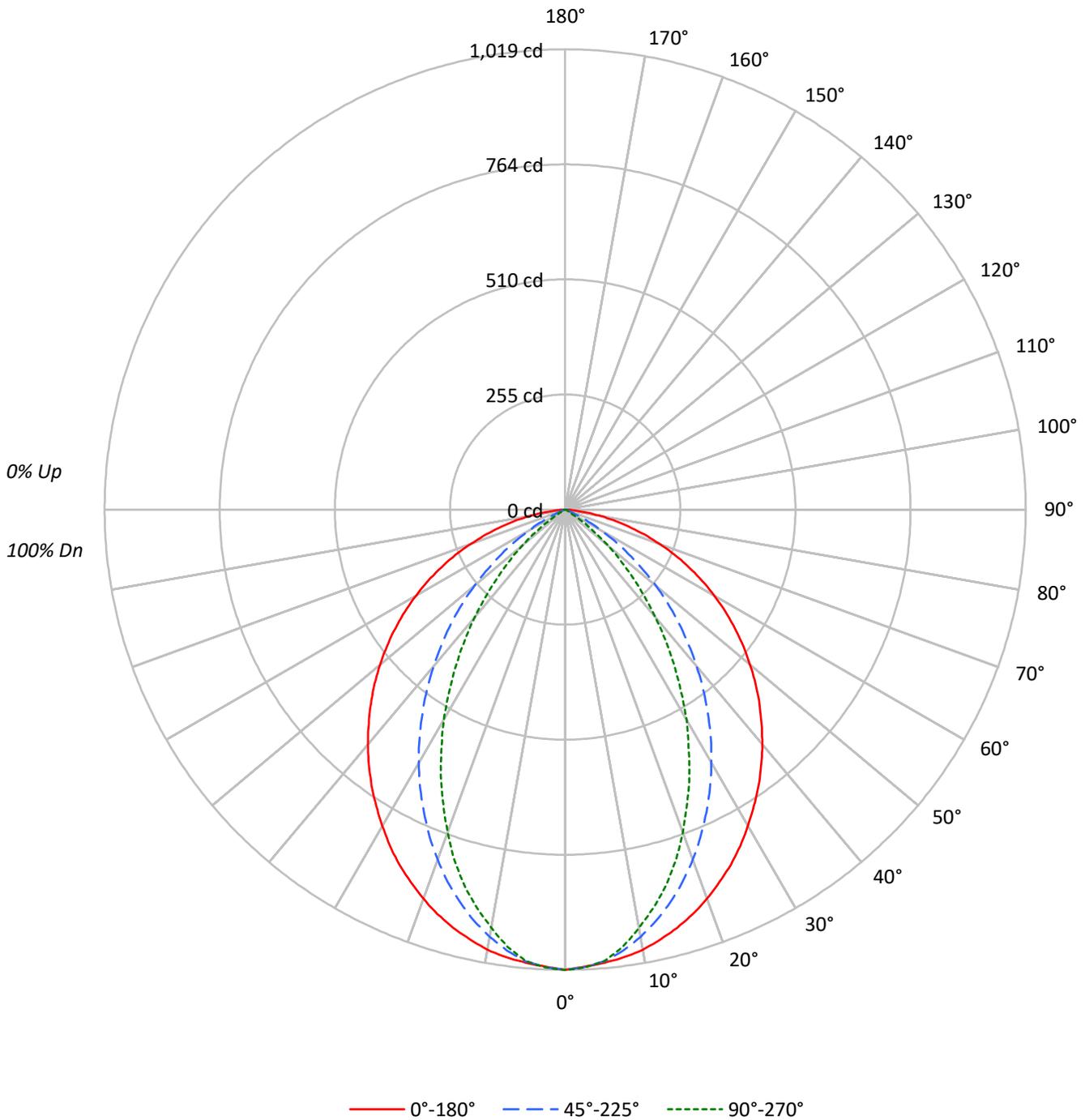
Lumens per Lamp: N/A
Luminaire Lumens: 1651.6 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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									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	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°	7204	7204	7204
5°	7145	7123	7116
10°	7104	6894	6749
15°	7014	6585	6304
20°	6899	6207	5721
25°	6767	5766	5073
30°	6603	5284	4385
35°	6441	4750	3625
40°	6262	4175	2870
45°	6078	3564	2079
50°	5875	2877	1344
55°	5651	2104	598
60°	5383	1299	171
65°	5052	473	102
70°	4572	167	41
75°	3971	55	27
80°	3041	41	0
85°	1395	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6078 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	5.7
10°-20°	254.1	15.4
20°-30°	343.8	20.8
30°-40°	353.2	21.4
40°-50°	292.6	17.7
50°-60°	187.9	11.4
60°-70°	90.7	5.5
70°-80°	30.7	1.9
80°-90°	3.9	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°	692.6	41.9
0°-40°	1045.8	63.3
0°-60°	1526.2	92.4
0°-90°	1651.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1651.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1007	1015	1004	998	1003	96
15°	958	946	900	868	861	270
25°	868	825	739	673	650	399
35°	746	675	550	454	420	467
45°	608	508	356	246	208	469
55°	458	336	171	75	48	410
65°	302	167	28	8	6	299
75°	145	31	2	1	1	154
85°	17	0	0	0	0	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1019.0	1019.0	1019.0	1019.0	1019.0
2.5°	1012.9	1021.0	1013.9	1012.9	1014.9
5°	1006.8	1014.9	1003.8	997.7	1002.8
7.5°	999.8	1003.8	984.6	974.5	976.5
10°	989.7	988.7	960.4	943.2	940.2
12.5°	974.5	969.5	932.1	907.9	902.8
15°	958.4	946.2	899.8	868.5	861.4
17.5°	939.2	920.0	864.4	824.1	814.0
20°	917.0	890.7	825.1	775.6	760.4
22.5°	892.7	859.4	783.7	725.1	704.9
25°	867.5	825.1	739.2	672.6	650.4
27.5°	839.2	789.7	694.8	619.0	591.8
30°	808.9	752.4	647.3	564.5	537.2
32.5°	777.6	715.0	599.9	510.0	476.7
35°	746.3	674.6	550.4	454.4	420.1
37.5°	713.0	634.2	501.9	401.9	364.6
40°	678.6	592.8	452.4	347.4	311.0
42.5°	643.3	550.4	402.9	295.9	258.5
45°	607.9	508.0	356.5	246.4	208.0
47.5°	571.6	464.5	308.0	197.9	164.6
50°	534.2	422.1	261.6	154.5	122.2
52.5°	496.9	378.7	214.1	112.1	82.8
55°	458.5	336.3	170.7	74.7	48.5
57.5°	420.1	292.9	130.3	41.4	18.2
60°	380.7	251.5	91.9	14.1	12.1
62.5°	342.3	207.0	57.6	11.1	9.1
65°	302.0	166.6	28.3	8.1	6.1
67.5°	262.6	128.3	12.1	5.0	3.0
70°	221.2	92.9	8.1	3.0	2.0
72.5°	182.8	59.6	5.0	2.0	1.0
75°	145.4	31.3	2.0	1.0	1.0
77.5°	109.1	13.1	1.0	1.0	1.0
80°	74.7	6.1	1.0	1.0	0.0
82.5°	44.4	2.0	1.0	1.0	0.0
85°	17.2	0.0	0.0	0.0	0.0
87.5°	1.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)