

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: P1055221

Luminaire Tested: S122R3DR-S485D950-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S485D950-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

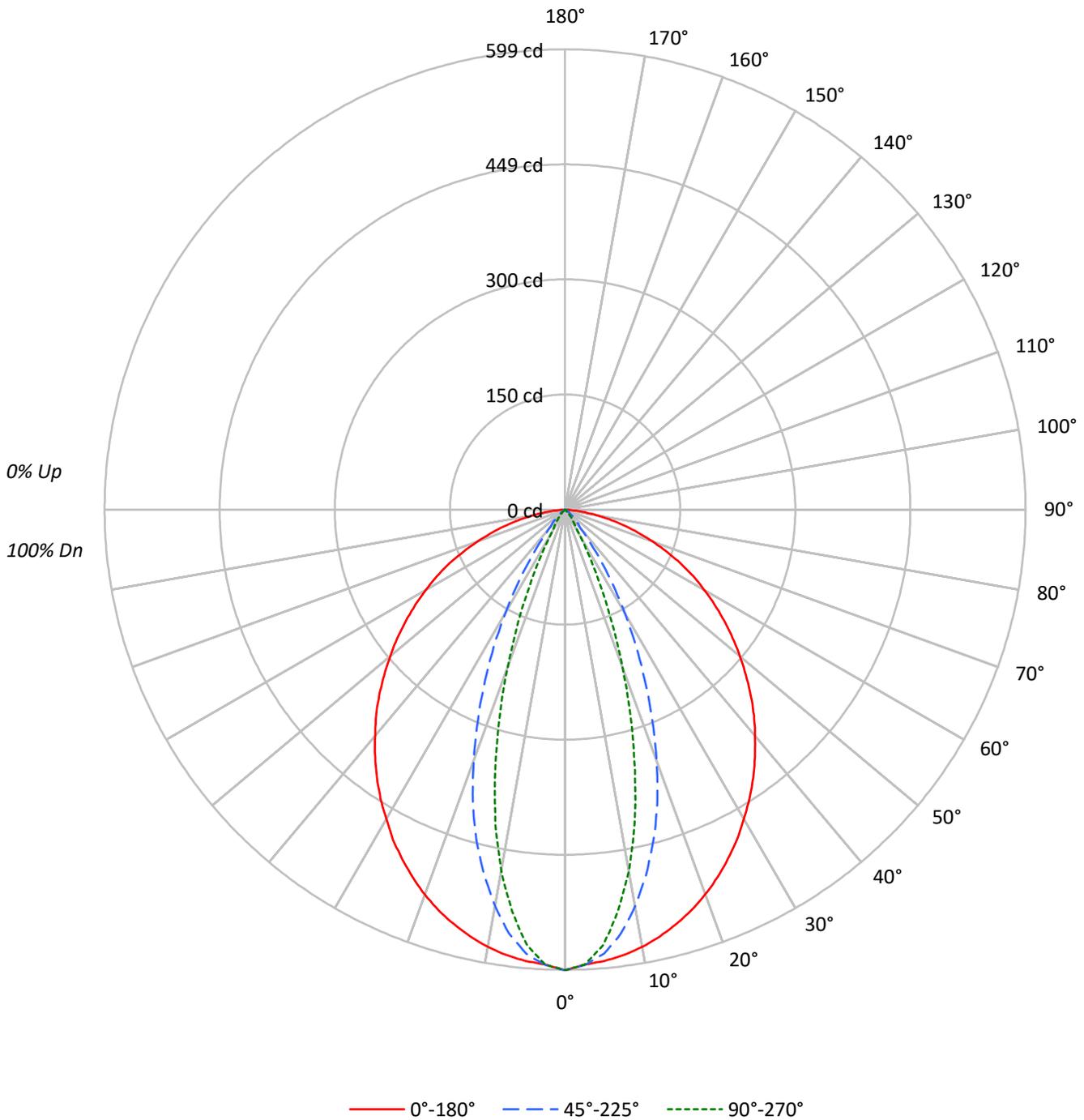
Lumens per Lamp: N/A
Luminaire Lumens: 545.3 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	47	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11356	11356	11356
5°	11215	11032	10823
10°	11120	10087	9184
15°	10958	8728	6879
20°	10750	7014	4403
25°	10484	5140	2262
30°	10173	3360	739
35°	9862	1864	430
40°	9507	749	237
45°	9155	498	91
50°	8751	283	41
55°	8350	135	23
60°	7908	53	0
65°	7442	31	0
70°	6681	39	0
75°	5746	51	0
80°	4364	0	0
85°	1804	152	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9155 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	9.9
10°-20°	124.8	22.9
20°-30°	126.8	23.2
30°-40°	95.1	17.4
40°-50°	66.6	12.2
50°-60°	40.8	7.5
60°-70°	24.3	4.5
70°-80°	11.2	2.1
80°-90°	2.0	0.4
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°	305.3	56.0
0°-40°	400.4	73.4
0°-60°	507.8	93.1
0°-90°	545.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	545.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	599	599	599	599	599	
5°	590	595	580	569	569	56
15°	559	528	445	377	351	157
25°	502	413	246	140	108	231
35°	426	278	81	24	19	267
45°	342	147	19	6	3	263
55°	253	45	4	1	1	226
65°	166	13	1	1	0	164
75°	78	1	1	1	0	83
85°	8	0	1	1	0	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	599.4	599.4	599.4	599.4	599.4
2.5°	592.5	601.4	593.2	591.8	592.5
5°	589.7	595.2	580.1	569.1	569.1
7.5°	584.9	584.9	556.7	533.9	527.0
10°	578.0	570.4	524.3	487.8	477.4
12.5°	569.1	551.1	486.4	434.7	418.2
15°	558.7	528.4	445.0	376.8	350.7
17.5°	547.0	502.9	398.9	314.2	283.8
20°	533.2	475.4	347.9	250.1	218.4
22.5°	518.1	445.0	296.2	192.9	159.1
25°	501.5	413.4	245.9	140.5	108.2
27.5°	484.3	380.3	199.8	96.5	66.1
30°	465.0	345.8	153.6	57.2	33.8
32.5°	446.4	312.8	115.1	31.0	24.8
35°	426.4	277.6	80.6	24.1	18.6
37.5°	405.8	244.6	49.6	17.9	13.8
40°	384.4	210.8	30.3	13.1	9.6
42.5°	363.8	179.1	24.1	9.0	6.2
45°	341.7	146.7	18.6	5.5	3.4
47.5°	319.0	117.1	13.8	3.4	2.1
50°	296.9	90.9	9.6	2.1	1.4
52.5°	274.9	66.8	6.2	1.4	0.7
55°	252.8	44.8	4.1	1.4	0.7
57.5°	230.8	31.7	2.8	0.7	0.7
60°	208.7	24.8	1.4	0.7	0.0
62.5°	188.1	19.3	1.4	0.7	0.7
65°	166.0	13.1	0.7	0.7	0.0
67.5°	142.6	8.3	0.7	0.7	0.0
70°	120.6	4.8	0.7	0.7	0.0
72.5°	99.2	2.8	0.7	0.7	0.0
75°	78.5	1.4	0.7	0.7	0.0
77.5°	58.6	0.7	0.0	0.7	0.0
80°	40.0	0.0	0.0	0.7	0.0
82.5°	23.4	0.0	0.0	0.7	0.0
85°	8.3	0.0	0.7	0.7	0.0
87.5°	0.0	0.0	0.7	0.7	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)