

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: P1055215

Luminaire Tested: S122R3DR-S485D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055215
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-S485D935-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

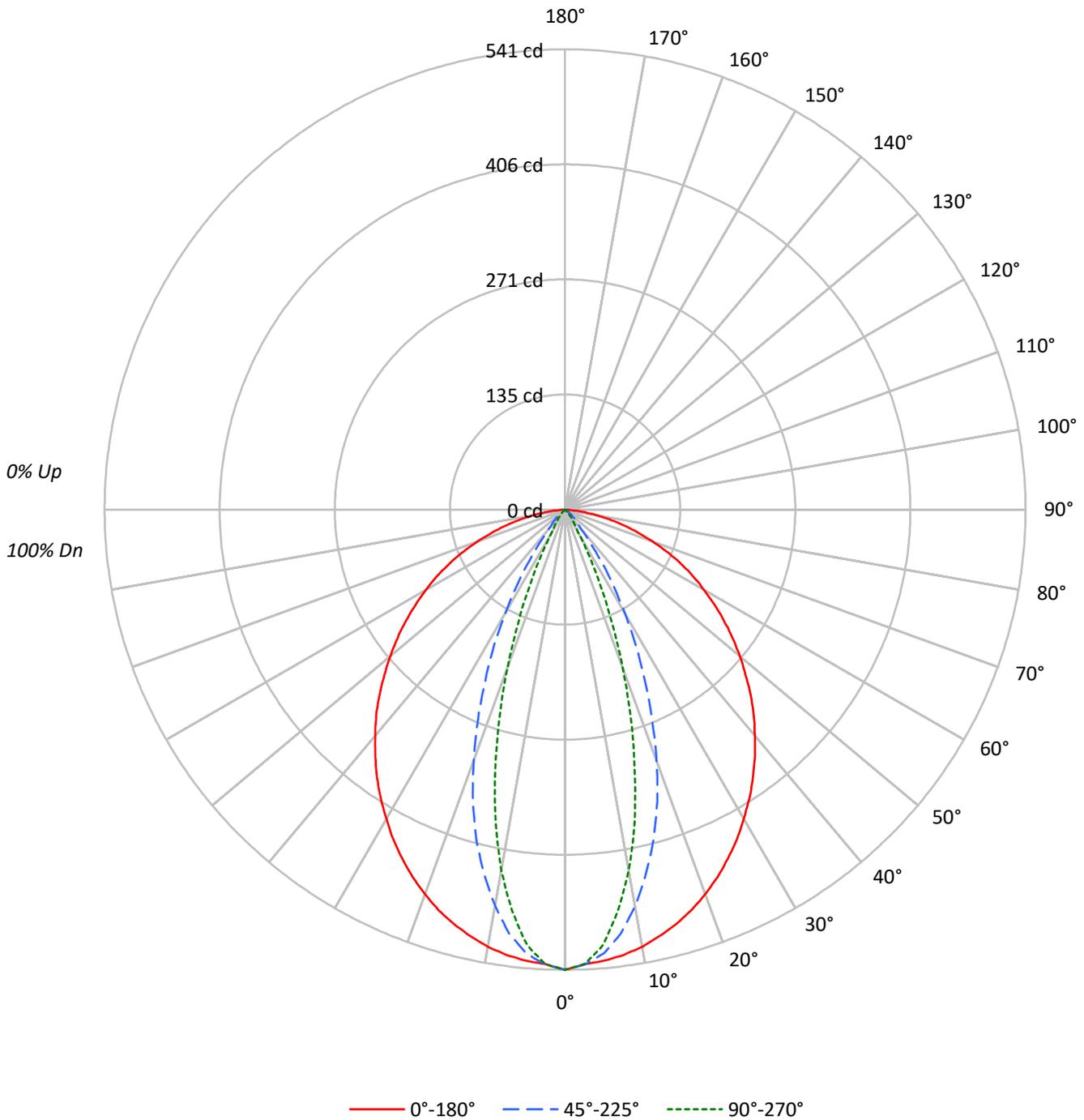
Lumens per Lamp: N/A
Luminaire Lumens: 492.1 lumens
Efficiency: N/A
Efficacy: 25.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	63	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	48	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10248	10248	10248
5°	10121	9956	9768
10°	10037	9103	8290
15°	9891	7879	6208
20°	9702	6331	3974
25°	9461	4641	2040
30°	9182	3034	667
35°	8902	1681	389
40°	8580	678	215
45°	8263	450	83
50°	7899	256	35
55°	7538	122	20
60°	7139	45	0
65°	6715	27	0
70°	6027	33	0
75°	5190	44	0
80°	3939	0	0
85°	1630	130	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8263 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.5	9.9
10°-20°	112.7	22.9
20°-30°	114.4	23.2
30°-40°	85.8	17.4
40°-50°	60.1	12.2
50°-60°	36.8	7.5
60°-70°	21.9	4.4
70°-80°	10.1	2.1
80°-90°	1.8	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°	275.6	56.0
0°-40°	361.4	73.4
0°-60°	458.3	93.1
0°-90°	492.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	492.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	532	537	524	514	514	50
15°	504	477	402	340	316	142
25°	453	373	222	127	98	208
35°	385	251	73	22	17	241
45°	308	132	17	5	3	238
55°	228	40	4	1	1	204
65°	150	12	1	1	0	148
75°	71	1	1	1	0	75
85°	8	0	1	1	0	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	540.9	540.9	540.9	540.9	540.9
2.5°	534.7	542.8	535.3	534.1	534.7
5°	532.2	537.2	523.5	513.6	513.6
7.5°	527.9	527.9	502.4	481.9	475.7
10°	521.7	514.8	473.2	440.2	430.9
12.5°	513.6	497.4	439.0	392.3	377.4
15°	504.3	476.9	401.7	340.1	316.5
17.5°	493.7	453.9	360.0	283.5	256.2
20°	481.2	429.0	314.0	225.7	197.1
22.5°	467.6	401.7	267.4	174.1	143.6
25°	452.6	373.1	222.0	126.8	97.6
27.5°	437.1	343.2	180.3	87.0	59.7
30°	419.7	312.1	138.7	51.6	30.5
32.5°	402.9	282.3	103.8	28.0	22.4
35°	384.9	250.6	72.7	21.8	16.8
37.5°	366.2	220.7	44.8	16.2	12.4
40°	346.9	190.3	27.4	11.8	8.7
42.5°	328.3	161.7	21.8	8.1	5.6
45°	308.4	132.4	16.8	5.0	3.1
47.5°	287.9	105.7	12.4	3.1	1.9
50°	268.0	82.1	8.7	1.9	1.2
52.5°	248.1	60.3	5.6	1.2	0.6
55°	228.2	40.4	3.7	1.2	0.6
57.5°	208.3	28.6	2.5	0.6	0.6
60°	188.4	22.4	1.2	0.6	0.0
62.5°	169.7	17.4	1.2	0.6	0.6
65°	149.8	11.8	0.6	0.6	0.0
67.5°	128.7	7.5	0.6	0.6	0.0
70°	108.8	4.4	0.6	0.6	0.0
72.5°	89.5	2.5	0.6	0.6	0.0
75°	70.9	1.2	0.6	0.6	0.0
77.5°	52.9	0.6	0.0	0.6	0.0
80°	36.1	0.0	0.0	0.6	0.0
82.5°	21.1	0.0	0.0	0.6	0.0
85°	7.5	0.0	0.6	0.6	0.0
87.5°	0.0	0.0	0.6	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)