

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: P1055204

Luminaire Tested: S122R3DR-S485D840-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055204
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S485D840-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

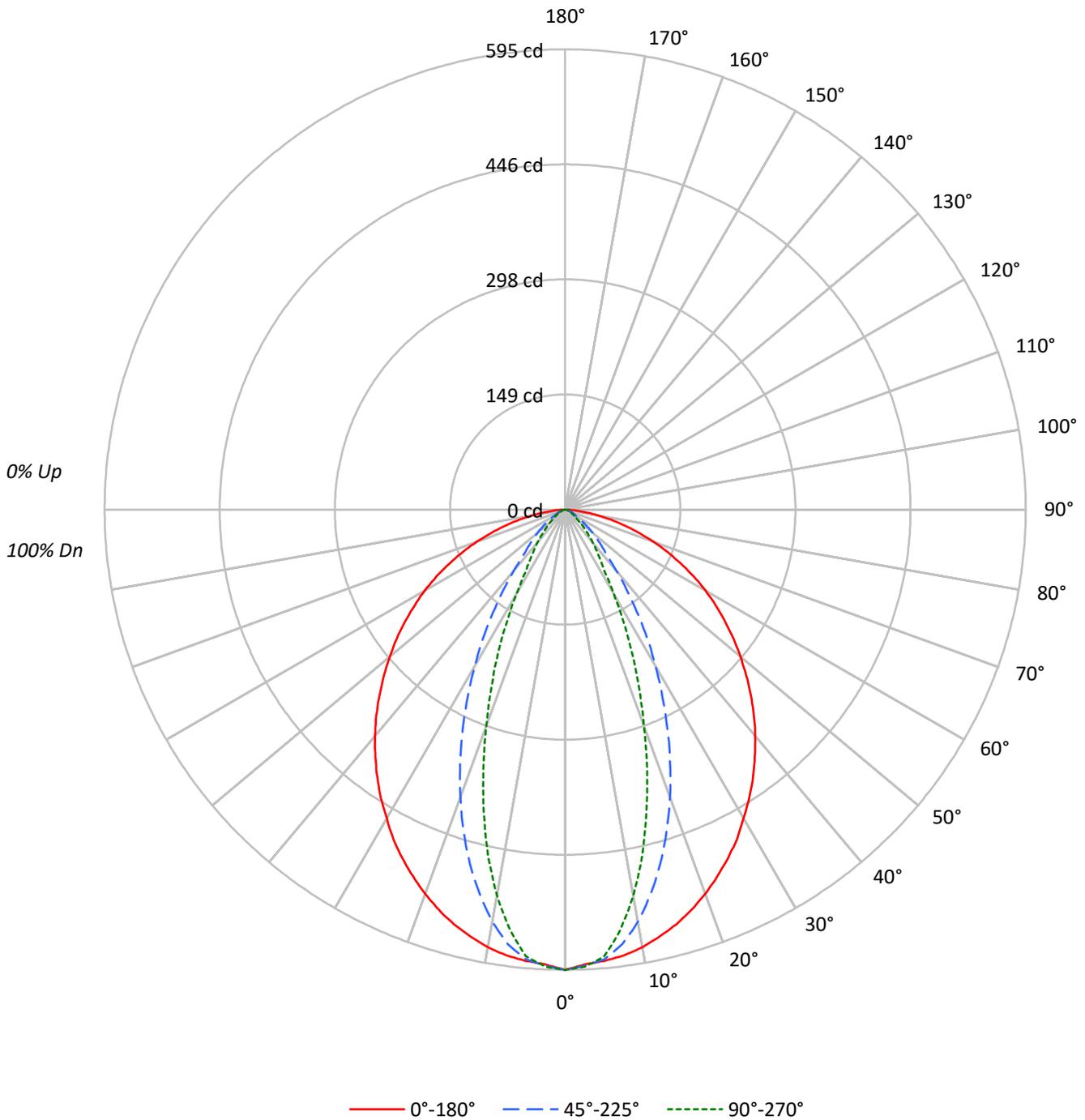
Lumens per Lamp: N/A
Luminaire Lumens: 682.0 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71			71	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58	
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			45	
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42	
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11275	11275	11275
5°	11137	11095	11027
10°	11056	10410	9750
15°	10886	9313	7954
20°	10660	7984	5998
25°	10398	6541	4283
30°	10083	5106	2728
35°	9783	3745	1823
40°	9450	2525	1370
45°	9086	1779	978
50°	8707	1353	687
55°	8334	938	505
60°	7931	637	413
65°	7357	457	327
70°	6708	366	283
75°	5819	322	212
80°	4615	240	240
85°	2543	326	152

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9086 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	8.0
10°-20°	133.5	19.6
20°-30°	152.6	22.4
30°-40°	129.4	19.0
40°-50°	96.5	14.2
50°-60°	62.4	9.1
60°-70°	34.8	5.1
70°-80°	15.3	2.2
80°-90°	3.2	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°	340.5	49.9
0°-40°	469.9	68.9
0°-60°	628.8	92.2
0°-90°	682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	682.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	586	593	583	578	580	56
15°	555	541	475	424	406	156
25°	497	439	313	229	205	229
35°	423	319	162	88	79	264
45°	339	201	66	43	36	262
55°	252	96	28	18	15	226
65°	164	35	10	8	7	163
75°	80	7	4	4	3	85
85°	12	1	2	1	1	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	595.1	595.1	595.1	595.1	595.1
2.5°	588.5	597.3	590.0	590.0	591.4
5°	585.6	592.9	583.4	577.6	579.8
7.5°	581.2	586.3	566.6	549.1	547.7
10°	574.7	576.9	541.1	514.1	506.8
12.5°	565.2	560.1	509.8	471.8	459.4
15°	555.0	541.1	474.8	424.4	405.5
17.5°	542.6	517.8	436.1	374.8	351.5
20°	528.7	493.7	396.0	323.1	297.5
22.5°	513.4	466.7	354.4	274.2	248.7
25°	497.4	439.0	312.9	229.0	204.9
27.5°	480.6	409.8	272.0	188.2	161.9
30°	460.9	379.9	233.4	148.8	124.7
32.5°	442.7	348.6	197.6	115.2	94.8
35°	423.0	318.7	161.9	88.2	78.8
37.5°	402.6	288.8	130.5	74.4	66.4
40°	382.1	258.9	102.1	62.7	55.4
42.5°	361.0	229.7	78.8	52.5	45.2
45°	339.1	201.3	66.4	43.0	36.5
47.5°	317.2	172.8	55.4	34.3	29.2
50°	295.4	145.9	45.9	27.0	23.3
52.5°	274.2	120.3	36.5	21.9	19.0
55°	252.3	95.5	28.4	17.5	15.3
57.5°	230.4	74.4	21.9	14.6	13.1
60°	209.3	56.2	16.8	11.7	10.9
62.5°	187.4	45.2	13.1	9.5	8.8
65°	164.1	35.0	10.2	8.0	7.3
67.5°	142.9	25.5	8.0	6.6	5.8
70°	121.1	17.5	6.6	5.8	5.1
72.5°	99.9	10.9	5.1	4.4	4.4
75°	79.5	7.3	4.4	3.6	2.9
77.5°	60.5	4.4	2.9	2.9	2.2
80°	42.3	2.9	2.2	2.2	2.2
82.5°	26.3	2.2	1.5	1.5	1.5
85°	11.7	0.7	1.5	0.7	0.7
87.5°	2.2	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)