

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1055161

Luminaire Tested: S122R3DRP-S1005D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1055161
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: S122R3DRP-S1005D935-X4F0-XX-UDD-F-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

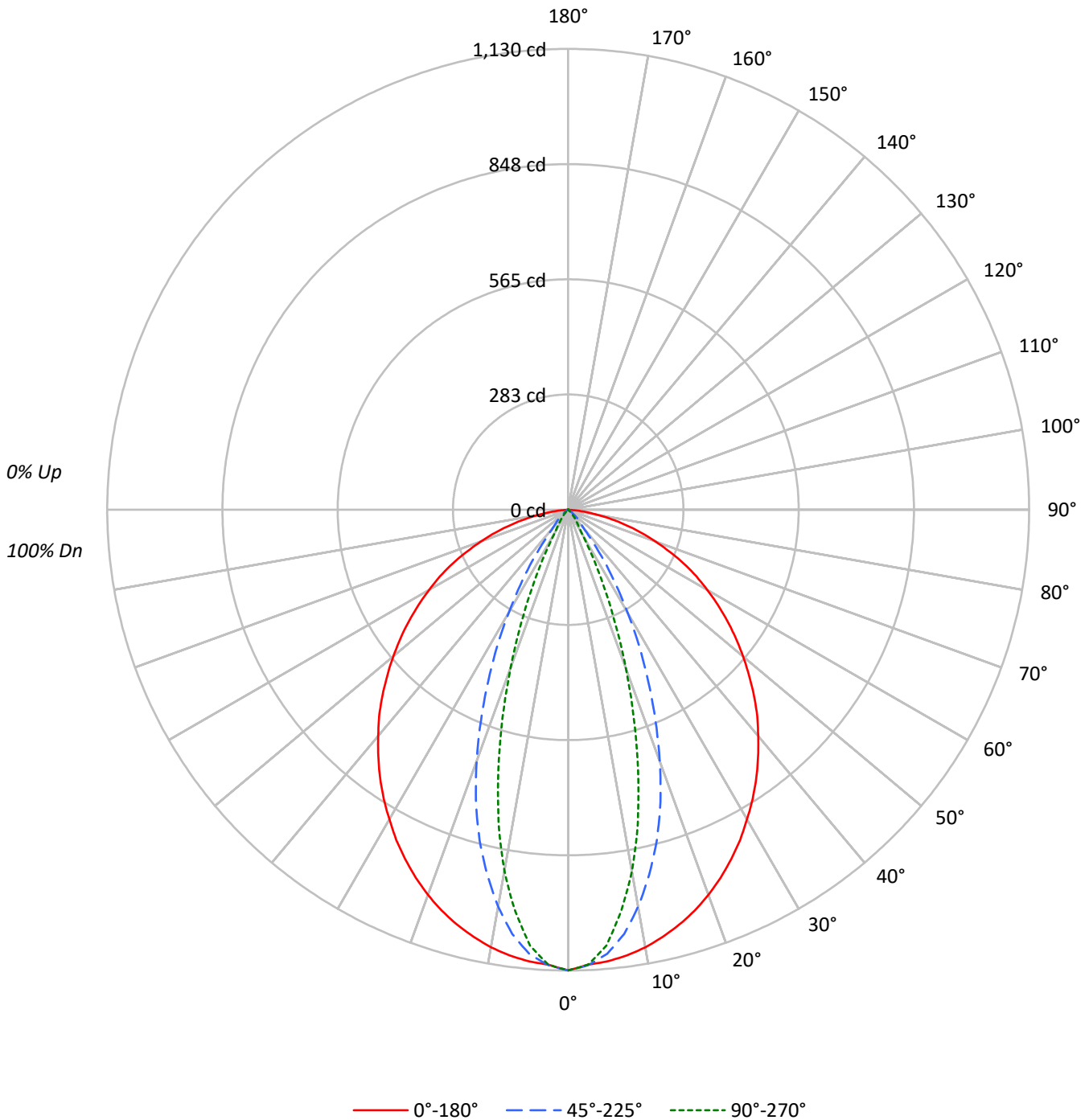
Lumens per Lamp: N/A
Luminaire Lumens: 1027.8 lumens
Efficiency: N/A
Efficacy: 24.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	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	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56					56			
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52					52			
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49					49			
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	47	44	43					43			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21403	21403	21403
5°	21139	20795	20399
10°	20960	19011	17312
15°	20656	16452	12963
20°	20265	13222	8299
25°	19761	9691	4262
30°	19175	6336	1391
35°	18591	3513	812
40°	17921	1412	450
45°	17258	940	174
50°	16497	536	77
55°	15743	258	43
60°	14910	99	0
65°	14027	58	0
70°	12586	72	0
75°	10834	95	0
80°	8216	0	0
85°	3391	283	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	9.9
10°-20°	235.3	22.9
20°-30°	238.9	23.2
30°-40°	179.3	17.4
40°-50°	125.5	12.2
50°-60°	76.8	7.5
60°-70°	45.8	4.5
70°-80°	21.1	2.1
80°-90°	3.8	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°	575.5	56.0
0°-40°	754.8	73.4
0°-60°	957.2	93.1
0°-90°	1027.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1027.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1112	1122	1093	1073	1073	105
15°	1053	996	839	710	661	297
25°	945	779	464	265	204	435
35°	804	523	152	45	35	502
45°	644	277	35	10	6	496
55°	477	84	8	3	1	426
65°	313	25	1	1	0	308
75°	148	3	1	1	0	157
85°	16	0	1	1	0	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.7	1129.7	1129.7	1129.7	1129.7
2.5°	1116.7	1133.6	1118.0	1115.4	1116.7
5°	1111.5	1121.9	1093.4	1072.6	1072.6
7.5°	1102.4	1102.4	1049.2	1006.4	993.4
10°	1089.5	1075.2	988.2	919.4	899.9
12.5°	1072.6	1038.8	916.8	819.4	788.2
15°	1053.1	996.0	838.8	710.3	660.9
17.5°	1031.0	947.9	751.8	592.1	535.0
20°	1005.1	896.0	655.8	471.4	411.6
22.5°	976.5	838.8	558.4	363.6	300.0
25°	945.3	779.1	463.6	264.9	203.9
27.5°	912.9	716.8	376.6	181.8	124.7
30°	876.5	651.9	289.6	107.8	63.6
32.5°	841.4	589.5	216.9	58.4	46.7
35°	803.8	523.3	151.9	45.4	35.1
37.5°	764.8	461.0	93.5	33.8	26.0
40°	724.6	397.3	57.1	24.7	18.2
42.5°	685.6	337.6	45.4	16.9	11.7
45°	644.1	276.6	35.1	10.4	6.5
47.5°	601.2	220.7	26.0	6.5	3.9
50°	559.7	171.4	18.2	3.9	2.6
52.5°	518.1	126.0	11.7	2.6	1.3
55°	476.6	84.4	7.8	2.6	1.3
57.5°	435.0	59.7	5.2	1.3	1.3
60°	393.5	46.7	2.6	1.3	0.0
62.5°	354.5	36.4	2.6	1.3	1.3
65°	312.9	24.7	1.3	1.3	0.0
67.5°	268.8	15.6	1.3	1.3	0.0
70°	227.2	9.1	1.3	1.3	0.0
72.5°	187.0	5.2	1.3	1.3	0.0
75°	148.0	2.6	1.3	1.3	0.0
77.5°	110.4	1.3	0.0	1.3	0.0
80°	75.3	0.0	0.0	1.3	0.0
82.5°	44.1	0.0	0.0	1.3	0.0
85°	15.6	0.0	1.3	1.3	0.0
87.5°	0.0	0.0	1.3	1.3	0.0
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.85	18.11	17.22	18.43	18.74	0.00	0.00	0.00	0.00	0.00
	3H	20.60	21.71	20.98	22.04	22.41	0.00	0.00	0.00	0.00	0.00
	4H	21.91	22.95	22.31	23.30	23.68	0.00	0.00	0.00	0.00	0.00
	6H	22.76	23.72	23.18	24.09	24.48	0.00	0.00	0.00	0.00	0.00
	8H	22.98	23.88	23.41	24.27	24.68	0.00	0.00	0.00	0.00	0.00
	12H	23.04	23.90	23.47	24.29	24.72	0.00	0.00	0.00	0.00	0.00
4H	2H	16.61	17.65	17.01	18.00	18.38	0.00	0.00	0.00	0.00	0.00
	3H	20.35	21.20	20.76	21.61	22.01	0.00	0.00	0.00	0.00	0.00
	4H	21.65	22.41	22.08	22.83	23.27	0.00	0.00	0.00	0.00	0.00
	6H	22.56	23.22	23.03	23.67	24.14	0.00	0.00	0.00	0.00	0.00
	8H	22.82	23.43	23.29	23.88	24.35	0.00	0.00	0.00	0.00	0.00
	12H	22.92	23.46	23.41	23.95	24.42	0.00	0.00	0.00	0.00	0.00
8H	4H	21.50	22.11	21.97	22.56	23.03	0.00	0.00	0.00	0.00	0.00
	6H	22.40	22.90	22.91	23.40	23.88	0.00	0.00	0.00	0.00	0.00
	8H	22.66	23.10	23.18	23.62	24.11	0.00	0.00	0.00	0.00	0.00
	12H	22.78	23.17	23.29	23.66	24.23	0.00	0.00	0.00	0.00	0.00
12H	4H	21.45	21.99	21.94	22.47	22.95	0.00	0.00	0.00	0.00	0.00
	6H	22.34	22.78	22.86	23.30	23.79	0.00	0.00	0.00	0.00	0.00
	8H	22.62	23.00	23.13	23.50	24.07	0.00	0.00	0.00	0.00	0.00