

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: P1055146

Luminaire Tested: S122R3DR-S1005D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055146
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-S1005D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

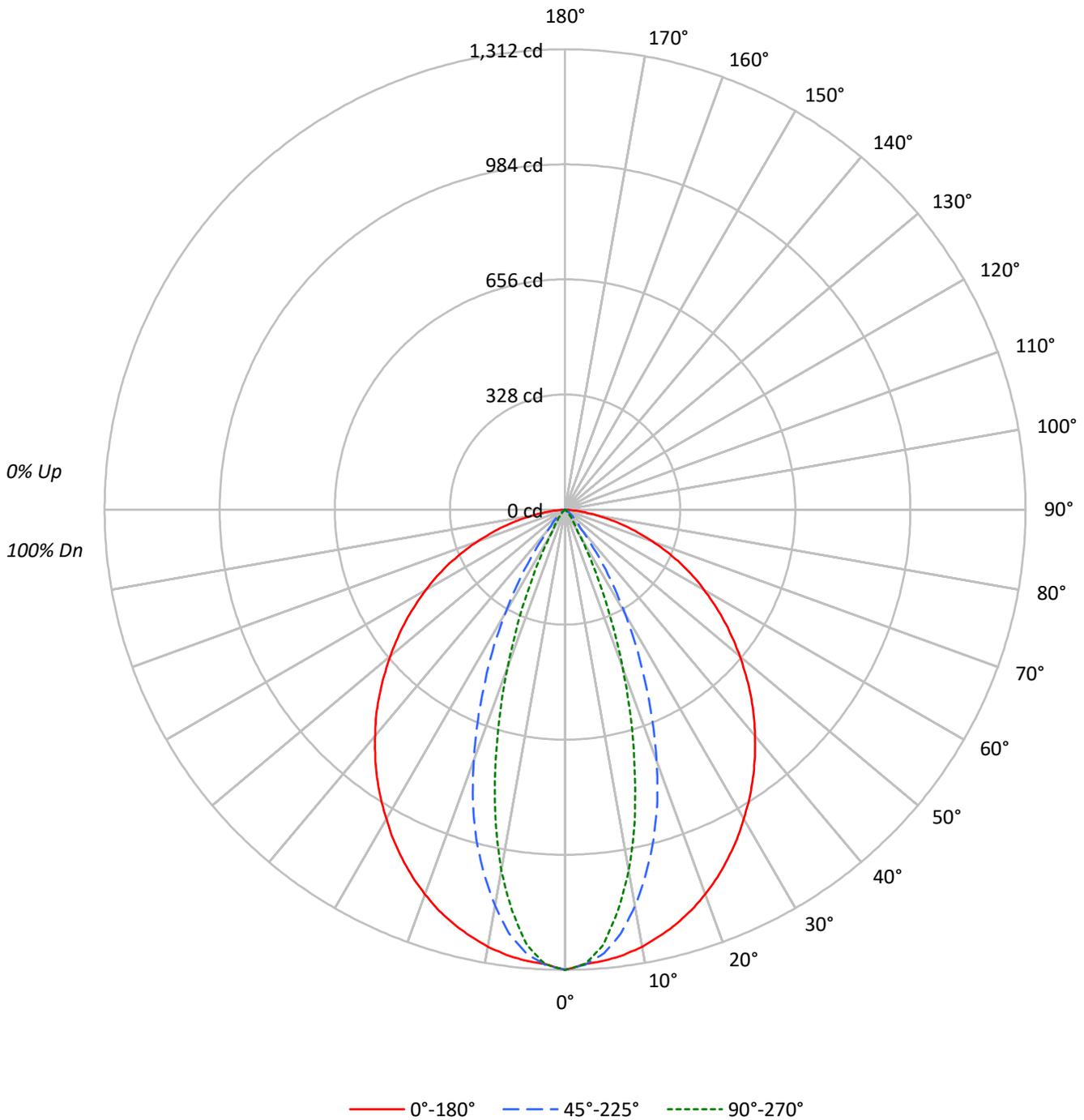
Lumens per Lamp: N/A
Luminaire Lumens: 1193.7 lumens
Efficiency: N/A
Efficacy: 28.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1055146

CATALOG NUMBER: S122R3DR-S1005D835-X4F0-XX-UDD-FLL-B

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				
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°	24859	24859	24859
5°	24553	24151	23691
10°	24342	22080	20108
15°	23990	19110	15058
20°	23535	15355	9639
25°	22951	11255	4950
30°	22271	7357	1617
35°	21593	4082	941
40°	20814	1642	522
45°	20042	1090	201
50°	19158	622	88
55°	18283	297	50
60°	17317	114	0
65°	16296	67	0
70°	14618	83	0
75°	12583	110	0
80°	9547	0	0
85°	3935	326	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20042 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.6	9.9
10°-20°	273.3	22.9
20°-30°	277.5	23.2
30°-40°	208.2	17.4
40°-50°	145.8	12.2
50°-60°	89.2	7.5
60°-70°	53.1	4.5
70°-80°	24.5	2.1
80°-90°	4.4	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°	668.4	56.0
0°-40°	876.6	73.4
0°-60°	1111.7	93.1
0°-90°	1193.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1193.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1291	1303	1270	1246	1246	122
15°	1223	1157	974	825	768	345
25°	1098	905	538	308	237	505
35°	934	608	176	53	41	583
45°	748	321	41	12	8	577
55°	554	98	9	3	2	495
65°	364	29	2	2	0	358
75°	172	3	2	2	0	183
85°	18	0	2	2	0	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.1	1312.1	1312.1	1312.1	1312.1
2.5°	1297.0	1316.6	1298.5	1295.5	1297.0
5°	1291.0	1303.1	1269.9	1245.7	1245.7
7.5°	1280.4	1280.4	1218.6	1168.8	1153.7
10°	1265.3	1248.8	1147.7	1067.8	1045.2
12.5°	1245.7	1206.5	1064.8	951.7	915.5
15°	1223.1	1156.8	974.3	825.0	767.7
17.5°	1197.5	1101.0	873.2	687.7	621.4
20°	1167.3	1040.6	761.6	547.5	478.1
22.5°	1134.1	974.3	648.5	422.3	348.4
25°	1097.9	904.9	538.4	307.7	236.8
27.5°	1060.2	832.5	437.4	211.1	144.8
30°	1018.0	757.1	336.3	125.2	73.9
32.5°	977.3	684.7	251.9	67.9	54.3
35°	933.6	607.8	176.5	52.8	40.7
37.5°	888.3	535.4	108.6	39.2	30.2
40°	841.6	461.5	66.4	28.7	21.1
42.5°	796.3	392.1	52.8	19.6	13.6
45°	748.0	321.2	40.7	12.1	7.5
47.5°	698.3	256.4	30.2	7.5	4.5
50°	650.0	199.1	21.1	4.5	3.0
52.5°	601.8	146.3	13.6	3.0	1.5
55°	553.5	98.0	9.0	3.0	1.5
57.5°	505.2	69.4	6.0	1.5	1.5
60°	457.0	54.3	3.0	1.5	0.0
62.5°	411.7	42.2	3.0	1.5	1.5
65°	363.5	28.7	1.5	1.5	0.0
67.5°	312.2	18.1	1.5	1.5	0.0
70°	263.9	10.6	1.5	1.5	0.0
72.5°	217.2	6.0	1.5	1.5	0.0
75°	171.9	3.0	1.5	1.5	0.0
77.5°	128.2	1.5	0.0	1.5	0.0
80°	87.5	0.0	0.0	1.5	0.0
82.5°	51.3	0.0	0.0	1.5	0.0
85°	18.1	0.0	1.5	1.5	0.0
87.5°	0.0	0.0	1.5	1.5	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)