

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: P1055157

Luminaire Tested: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

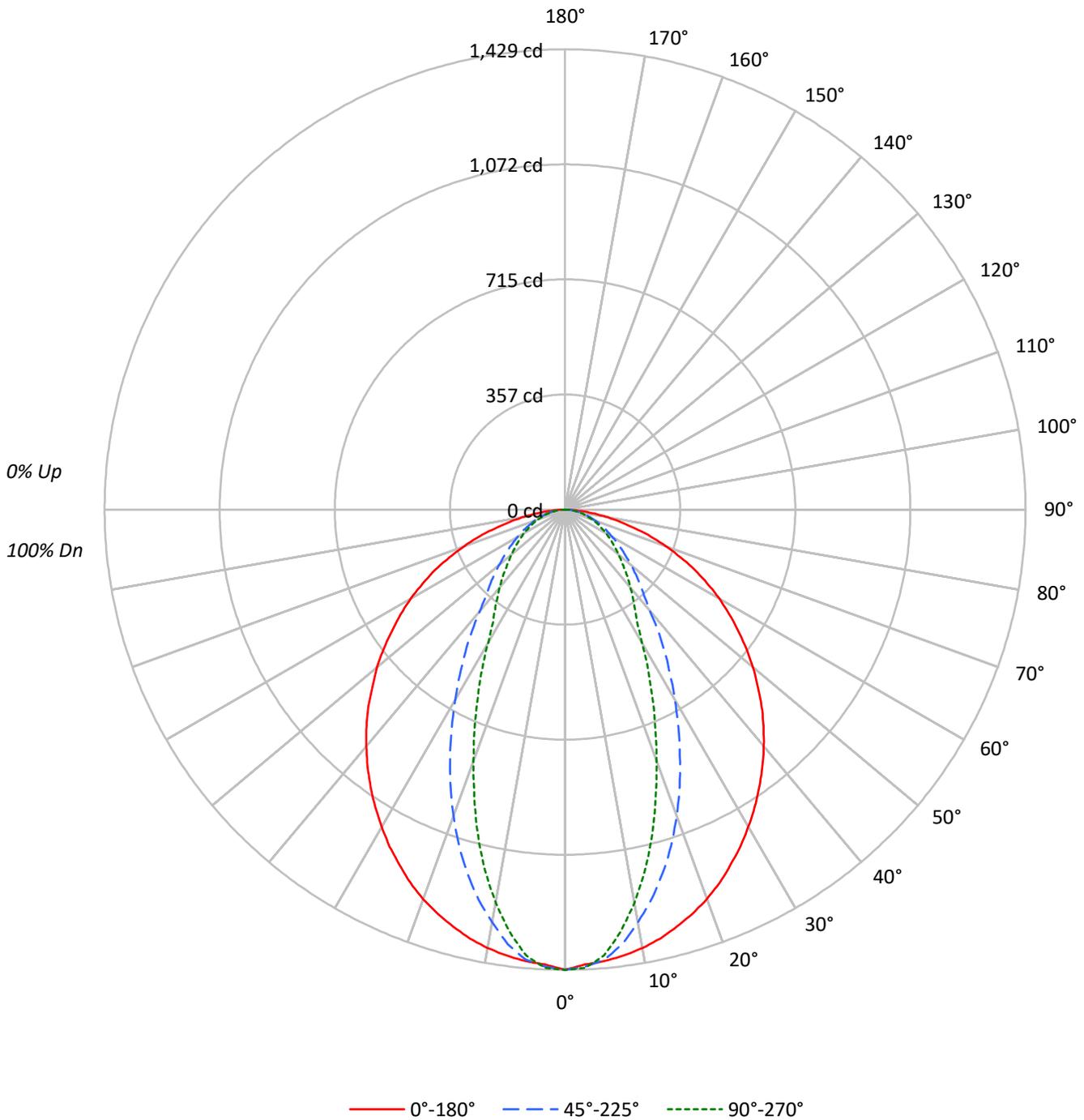
Lumens per Lamp: N/A
Luminaire Lumens: 2161.3 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1055157

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055157

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27072	27072	27072
5°	26766	26675	26426
10°	26593	25031	23834
15°	26293	22941	20505
20°	25942	20402	16740
25°	25424	17633	13362
30°	24883	14898	10429
35°	24317	12462	8759
40°	23728	10106	7800
45°	23112	8834	6980
50°	22430	7817	6372
55°	21665	7065	5919
60°	20916	6430	5525
65°	19922	5891	5196
70°	18463	5495	4897
75°	16353	4985	4634
80°	13944	4692	4299
85°	9608	4152	3891

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23112 cd/sqm



TEST NUMBER: P1055157

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	6.1
10°-20°	330.6	15.3
20°-30°	407.4	18.8
30°-40°	390.8	18.1
40°-50°	337.1	15.6
50°-60°	261.5	12.1
60°-70°	179.1	8.3
70°-80°	97.2	4.5
80°-90°	26.7	1.2
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°	868.9	40.2
0°-40°	1259.7	58.3
0°-60°	1858.3	86.0
0°-90°	2161.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2161.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1407	1428	1403	1385	1390	134
15°	1340	1300	1170	1074	1045	378
25°	1216	1086	844	688	639	561
35°	1051	834	539	401	379	658
45°	863	581	330	272	260	665
55°	656	349	214	185	179	587
65°	444	190	131	120	116	439
75°	223	87	68	64	63	239
85°	44	22	19	19	18	56
90°	0	0	0	0	0	



TEST NUMBER: P1055157

CATALOG NUMBER: S122R3DR-S1005D927-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1428.9	1428.9	1428.9	1428.9	1428.9
2.5°	1413.4	1437.3	1420.5	1420.5	1424.1
5°	1407.4	1427.7	1402.6	1384.7	1389.5
7.5°	1396.6	1411.0	1360.8	1322.6	1321.4
10°	1382.3	1383.5	1301.1	1250.9	1238.9
12.5°	1364.4	1345.3	1240.1	1164.9	1146.9
15°	1340.5	1299.9	1169.6	1074.1	1045.4
17.5°	1315.4	1253.3	1094.4	974.9	935.5
20°	1286.7	1197.1	1011.9	875.7	830.3
22.5°	1254.5	1143.4	929.5	780.2	732.4
25°	1216.2	1086.0	843.5	688.2	639.2
27.5°	1179.2	1027.5	761.0	606.9	556.7
30°	1137.4	964.1	681.0	529.3	476.7
32.5°	1095.6	899.6	606.9	455.2	415.8
35°	1051.4	833.9	538.8	401.4	378.7
37.5°	1006.0	769.4	474.3	365.6	345.3
40°	959.4	704.9	408.6	330.9	315.4
42.5°	911.6	641.6	363.2	302.3	287.9
45°	862.6	580.6	329.7	272.4	260.5
47.5°	810.0	519.7	297.5	247.3	236.6
50°	761.0	461.2	265.2	224.6	216.2
52.5°	708.5	403.8	238.9	204.3	197.1
55°	655.9	348.9	213.9	185.2	179.2
57.5°	604.5	296.3	190.0	167.3	162.5
60°	552.0	254.5	169.7	150.5	145.8
62.5°	498.2	221.0	150.5	135.0	130.2
65°	444.4	190.0	131.4	119.5	115.9
67.5°	388.3	160.1	114.7	105.1	102.7
70°	333.3	133.8	99.2	90.8	88.4
72.5°	279.6	108.7	83.6	77.7	75.3
75°	223.4	87.2	68.1	64.5	63.3
77.5°	174.4	68.1	55.0	52.6	51.4
80°	127.8	50.2	43.0	40.6	39.4
82.5°	84.8	34.6	31.1	29.9	28.7
85°	44.2	21.5	19.1	19.1	17.9
87.5°	14.3	9.6	9.6	9.6	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)