

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: P1055562

Luminaire Tested: S123R3DR-S1000D927-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055562
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S1000D927-X4F0-XX-UDD-FLL-W
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

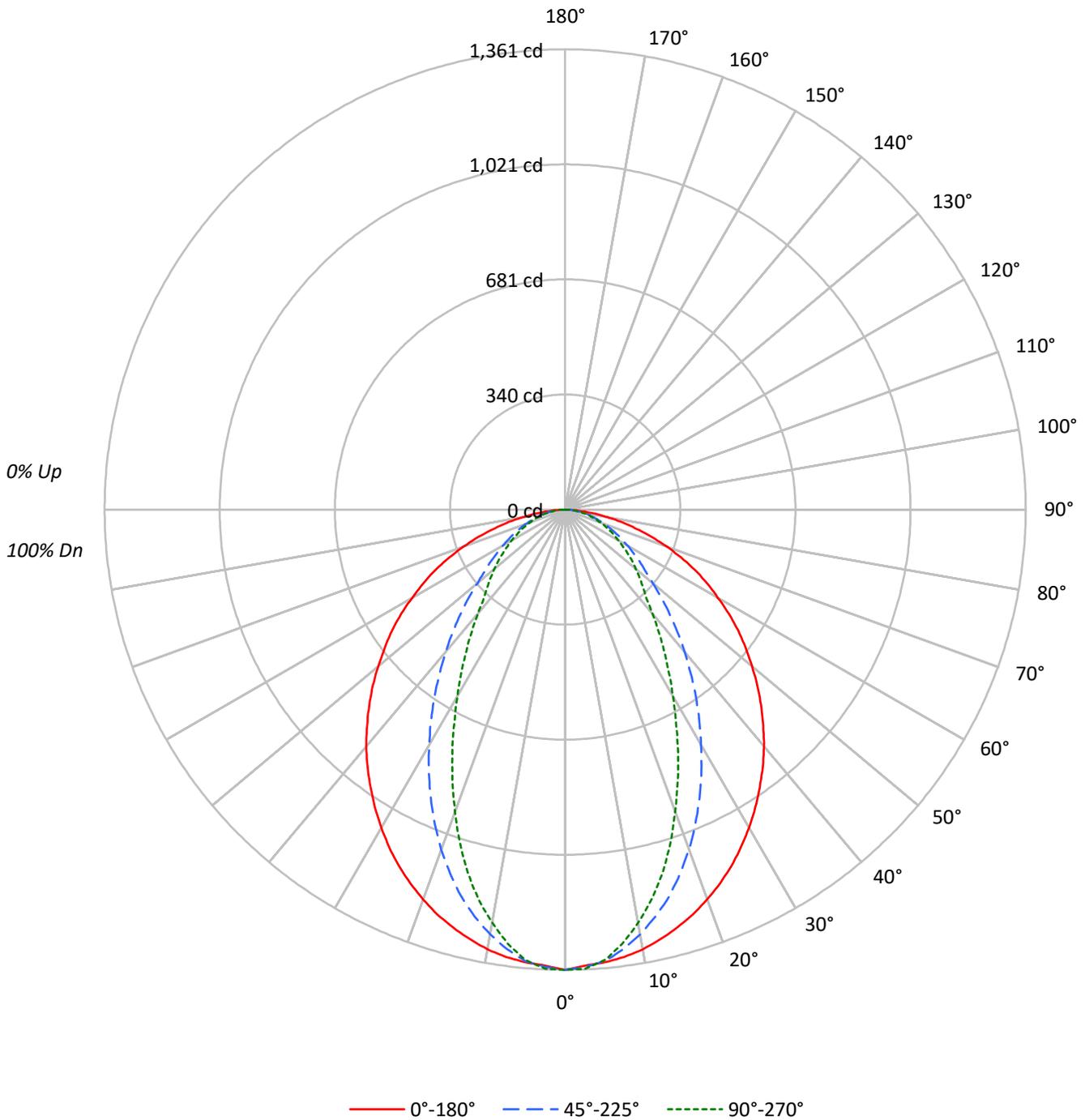
Lumens per Lamp: N/A
Luminaire Lumens: 2387.1 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88				86	
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76				74	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67				65	
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59				57	
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52				50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47				45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42				40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39				37	
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35				34	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16410	16410	16410
5°	16263	16226	16189
10°	16165	15616	15192
15°	15972	14791	13876
20°	15739	13727	12199
25°	15466	12499	10496
30°	15122	11182	8872
35°	14758	9889	7492
40°	14388	8636	6297
45°	13956	7446	5555
50°	13518	6340	5098
55°	13116	5650	4708
60°	12568	5105	4393
65°	12053	4676	4125
70°	11231	4308	3874
75°	10052	3983	3652
80°	8623	3673	3395
85°	6059	3375	3237

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13956 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	5.3
10°-20°	333.8	14.0
20°-30°	439.7	18.4
30°-40°	446.3	18.7
40°-50°	387.9	16.3
50°-60°	304.0	12.7
60°-70°	206.5	8.7
70°-80°	111.9	4.7
80°-90°	30.8	1.3
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°	899.7	37.7
0°-40°	1346.0	56.4
0°-60°	2037.9	85.4
0°-90°	2387.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2387.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1361	1361	1361	1361	1361	
5°	1344	1360	1341	1328	1338	128
15°	1280	1261	1185	1127	1112	361
25°	1163	1092	940	822	789	535
35°	1003	884	672	544	509	627
45°	818	657	437	337	326	632
55°	624	434	269	229	224	557
65°	422	234	164	147	145	417
75°	216	108	86	79	78	230
85°	44	26	24	22	23	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1361.1	1361.1	1361.1	1361.1	1361.1
2.5°	1349.9	1367.2	1353.9	1355.0	1359.0
5°	1343.8	1360.1	1340.7	1328.5	1337.7
7.5°	1334.6	1346.8	1311.2	1291.8	1294.9
10°	1320.4	1324.4	1275.6	1245.0	1240.9
12.5°	1301.0	1293.9	1232.8	1188.0	1180.9
15°	1279.6	1261.3	1185.0	1126.9	1111.7
17.5°	1255.2	1224.7	1129.0	1057.7	1034.3
20°	1226.7	1183.9	1069.9	979.3	950.8
22.5°	1196.2	1141.2	1005.8	898.9	869.4
25°	1162.6	1092.3	939.6	822.5	789.0
27.5°	1125.9	1043.5	872.4	747.2	709.5
30°	1086.2	992.6	803.2	673.9	637.3
32.5°	1045.5	938.6	737.0	605.7	570.1
35°	1002.7	883.6	671.9	543.6	509.0
37.5°	959.0	827.6	608.8	484.6	452.0
40°	914.2	770.6	548.7	429.6	400.1
42.5°	866.3	713.6	490.7	377.7	355.3
45°	818.5	656.6	436.7	337.0	325.8
47.5°	770.6	598.6	385.8	308.5	298.3
50°	720.7	542.6	338.0	282.0	271.8
52.5°	671.9	487.6	298.3	256.5	249.4
55°	624.0	433.7	268.8	229.1	224.0
57.5°	574.2	380.7	239.2	207.7	201.6
60°	521.2	329.8	211.7	185.3	182.2
62.5°	473.4	282.0	187.3	165.9	162.9
65°	422.5	234.1	163.9	146.6	144.6
67.5°	370.6	194.4	142.5	128.3	127.3
70°	318.6	163.9	122.2	111.0	109.9
72.5°	267.7	135.4	102.8	95.7	93.7
75°	215.8	107.9	85.5	79.4	78.4
77.5°	169.0	83.5	68.2	64.1	63.1
80°	124.2	62.1	52.9	49.9	48.9
82.5°	81.4	42.8	37.7	35.6	35.6
85°	43.8	26.5	24.4	22.4	23.4
87.5°	15.3	11.2	11.2	10.2	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)