

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: P1055591

Luminaire Tested: S123R3DR-S1165D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055591
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S1165D930-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

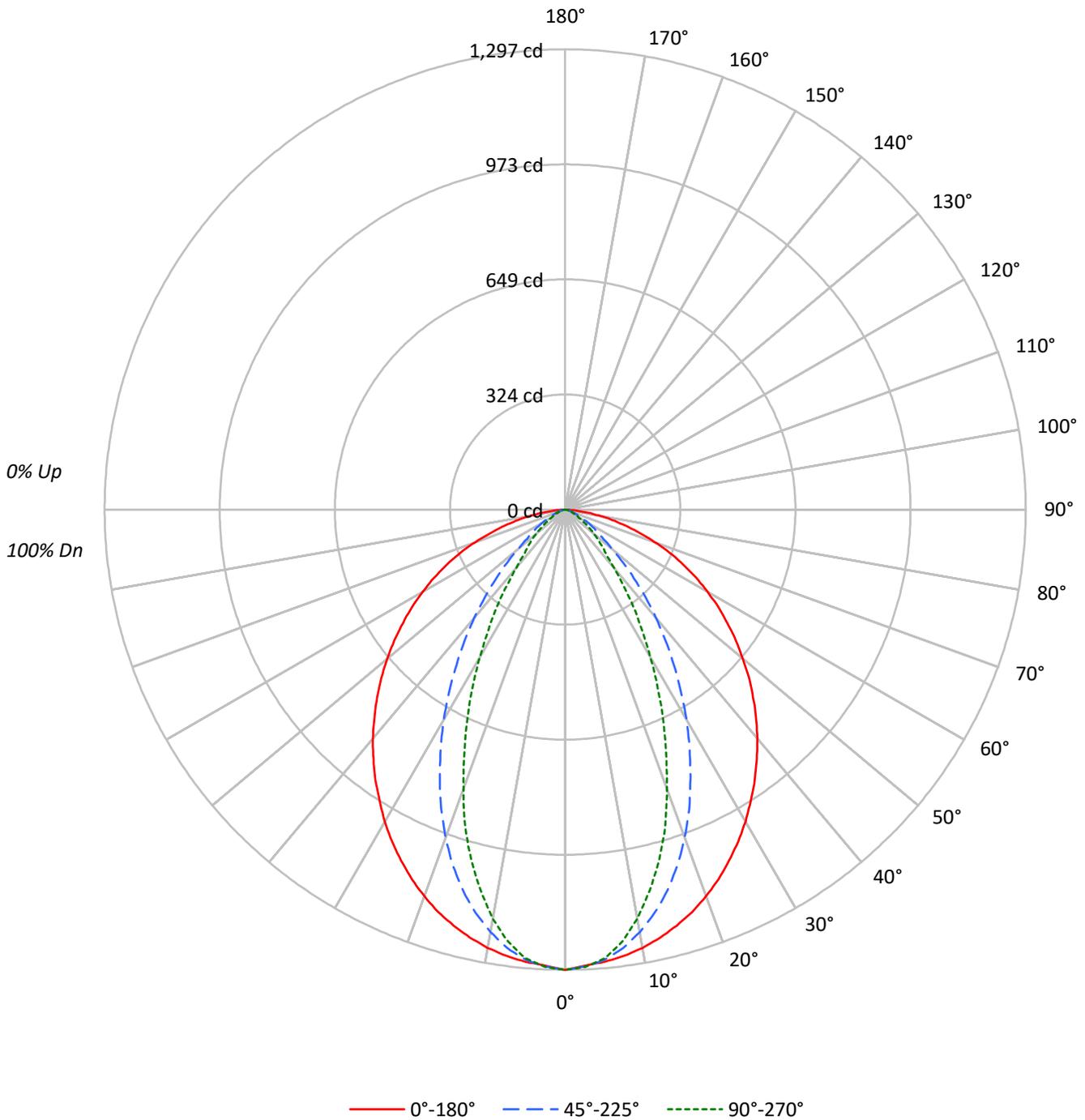
Lumens per Lamp: N/A
Luminaire Lumens: 1804.0 lumens
Efficiency: N/A
Efficacy: 43.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15640	15640	15640
5°	15477	15417	15373
10°	15354	14797	14331
15°	15148	13875	12754
20°	14877	12621	10744
25°	14525	11106	8669
30°	14139	9518	6675
35°	13700	7854	4941
40°	13257	6251	3366
45°	12767	4675	2537
50°	12246	3252	1983
55°	11708	2377	1448
60°	11147	1780	1037
65°	10487	1192	807
70°	9493	867	649
75°	8189	629	517
80°	6575	514	424
85°	3403	512	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12767 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	6.6
10°-20°	312.1	17.3
20°-30°	392.2	21.7
30°-40°	365.3	20.2
40°-50°	279.6	15.5
50°-60°	185.9	10.3
60°-70°	100.2	5.6
70°-80°	41.0	2.3
80°-90°	7.8	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°	824.2	45.7
0°-40°	1189.5	65.9
0°-60°	1655.0	91.7
0°-90°	1804.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1804.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1279	1292	1274	1269	1270	121
15°	1214	1194	1112	1046	1022	342
25°	1092	1018	835	696	652	503
35°	931	793	534	378	336	582
45°	749	553	274	161	149	578
55°	557	322	113	79	69	499
65°	368	124	42	31	28	363
75°	176	30	14	12	11	188
85°	25	4	4	4	2	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1297.2	1297.2	1297.2	1297.2	1297.2
2.5°	1286.2	1302.1	1288.6	1289.8	1289.8
5°	1278.8	1292.3	1273.9	1268.9	1270.2
7.5°	1268.9	1277.5	1246.8	1230.8	1228.4
10°	1254.2	1256.6	1208.7	1180.4	1170.6
12.5°	1235.7	1227.1	1164.4	1117.7	1099.3
15°	1213.6	1193.9	1111.6	1046.4	1021.8
17.5°	1189.0	1155.8	1051.3	966.5	936.9
20°	1159.5	1112.8	983.7	877.9	837.4
22.5°	1127.5	1067.3	912.4	786.9	741.4
25°	1091.9	1018.1	834.9	695.9	651.7
27.5°	1055.0	965.2	758.7	609.9	564.4
30°	1015.6	911.1	683.7	526.3	479.5
32.5°	972.6	852.1	606.2	448.8	402.1
35°	930.8	793.1	533.6	377.5	335.7
37.5°	886.5	734.1	463.6	314.8	268.1
40°	842.3	673.8	397.2	253.3	213.9
42.5°	795.5	613.6	334.4	201.7	170.9
45°	748.8	553.3	274.2	161.1	148.8
47.5°	702.1	493.1	221.3	138.9	126.6
50°	652.9	435.3	173.4	118.0	105.7
52.5°	606.2	377.5	135.3	97.1	86.1
55°	557.0	322.2	113.1	78.7	68.9
57.5°	511.5	265.6	93.4	61.5	54.1
60°	462.3	215.2	73.8	48.0	43.0
62.5°	415.6	168.5	56.6	38.1	34.4
65°	367.6	124.2	41.8	30.7	28.3
67.5°	319.7	89.8	32.0	24.6	23.4
70°	269.3	67.6	24.6	19.7	18.4
72.5°	221.3	48.0	18.4	16.0	14.8
75°	175.8	29.5	13.5	12.3	11.1
77.5°	135.3	17.2	9.8	9.8	8.6
80°	94.7	9.8	7.4	7.4	6.1
82.5°	57.8	6.1	4.9	4.9	4.9
85°	24.6	3.7	3.7	3.7	2.5
87.5°	3.7	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)