

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: P1055594

Luminaire Tested: S123R3DR-S1165D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055594
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-S1165D935-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

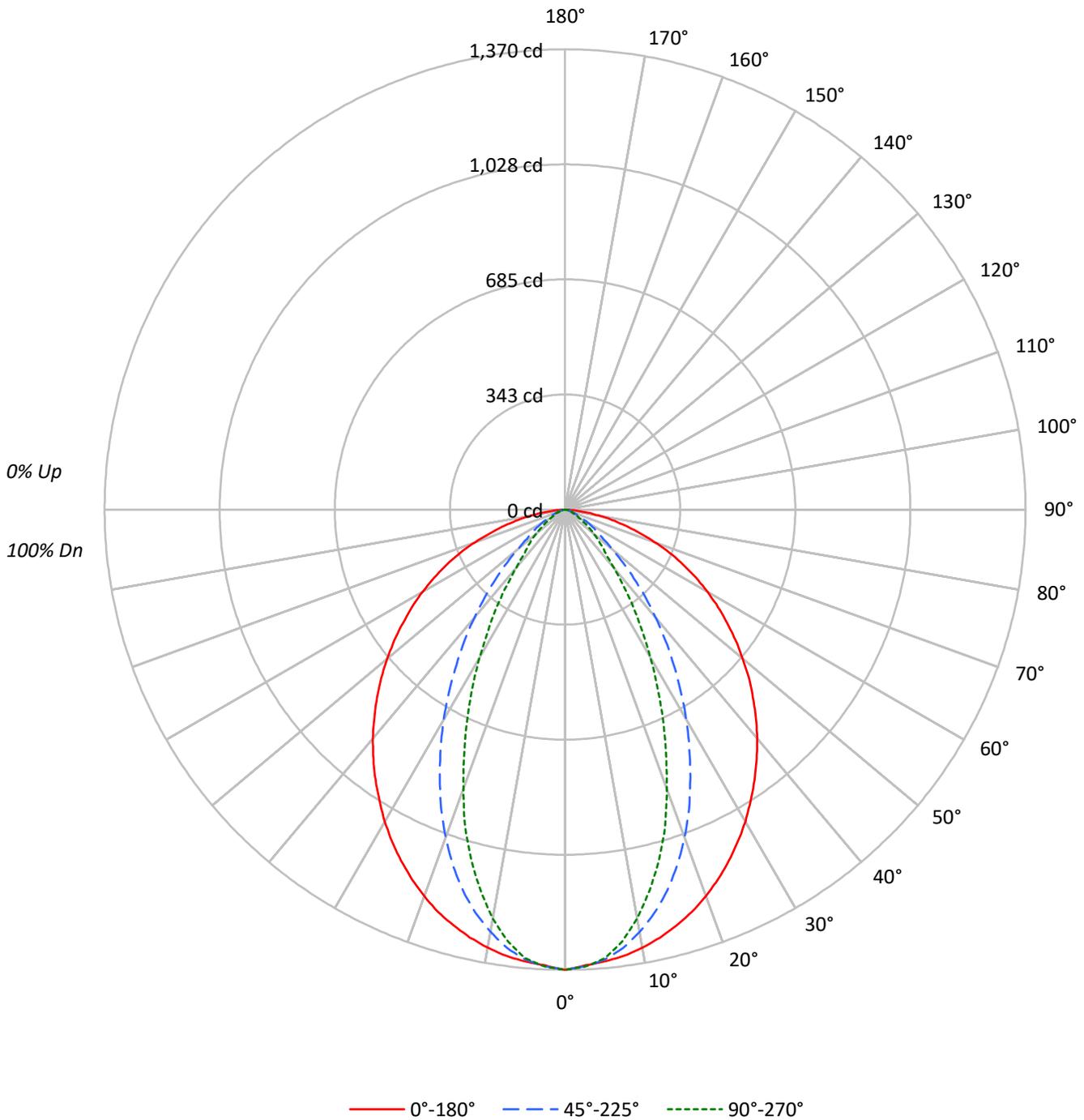
Lumens per Lamp: N/A
Luminaire Lumens: 1905.2 lumens
Efficiency: N/A
Efficacy: 45.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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°	16516	16516	16516
5°	16344	16281	16234
10°	16215	15626	15134
15°	15997	14652	13469
20°	15711	13328	11346
25°	15339	11729	9155
30°	14932	10051	7050
35°	14468	8295	5218
40°	13999	6601	3555
45°	13483	4938	2679
50°	12933	3434	2095
55°	12364	2512	1528
60°	11772	1878	1095
65°	11077	1258	853
70°	10025	917	687
75°	8650	666	545
80°	6943	542	451
85°	3597	539	360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13483 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.6	6.6
10°-20°	329.6	17.3
20°-30°	414.2	21.7
30°-40°	385.7	20.2
40°-50°	295.3	15.5
50°-60°	196.3	10.3
60°-70°	105.8	5.6
70°-80°	43.4	2.3
80°-90°	8.3	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°	870.4	45.7
0°-40°	1256.2	65.9
0°-60°	1747.7	91.7
0°-90°	1905.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1350	1365	1345	1340	1341	128
15°	1282	1261	1174	1105	1079	361
25°	1153	1075	882	735	688	531
35°	983	838	564	399	354	615
45°	791	584	290	170	157	610
55°	588	340	120	83	73	527
65°	388	131	44	32	30	384
75°	186	31	14	13	12	199
85°	26	4	4	4	3	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1369.9	1369.9	1369.9	1369.9	1369.9
2.5°	1358.2	1375.1	1360.8	1362.1	1362.1
5°	1350.5	1364.7	1345.3	1340.1	1341.4
7.5°	1340.1	1349.2	1316.7	1299.8	1297.2
10°	1324.5	1327.1	1276.4	1246.6	1236.2
12.5°	1305.0	1295.9	1229.7	1180.3	1160.9
15°	1281.6	1260.9	1173.9	1105.0	1079.1
17.5°	1255.7	1220.6	1110.2	1020.6	989.5
20°	1224.5	1175.2	1038.8	927.1	884.3
22.5°	1190.7	1127.1	963.5	831.0	783.0
25°	1153.1	1075.2	881.7	735.0	688.2
27.5°	1114.1	1019.3	801.2	644.1	596.0
30°	1072.6	962.2	722.0	555.8	506.4
32.5°	1027.1	899.9	640.2	474.0	424.6
35°	983.0	837.5	563.6	398.6	354.5
37.5°	936.2	775.2	489.5	332.4	283.1
40°	889.5	711.6	419.4	267.5	225.9
42.5°	840.1	648.0	353.2	213.0	180.5
45°	790.8	584.3	289.6	170.1	157.1
47.5°	741.5	520.7	233.7	146.7	133.7
50°	689.5	459.7	183.1	124.7	111.7
52.5°	640.2	398.6	142.8	102.6	90.9
55°	588.2	340.2	119.5	83.1	72.7
57.5°	540.2	280.5	98.7	64.9	57.1
60°	488.2	227.2	77.9	50.6	45.4
62.5°	438.9	177.9	59.7	40.3	36.4
65°	388.3	131.1	44.1	32.5	29.9
67.5°	337.6	94.8	33.8	26.0	24.7
70°	284.4	71.4	26.0	20.8	19.5
72.5°	233.7	50.6	19.5	16.9	15.6
75°	185.7	31.2	14.3	13.0	11.7
77.5°	142.8	18.2	10.4	10.4	9.1
80°	100.0	10.4	7.8	7.8	6.5
82.5°	61.0	6.5	5.2	5.2	5.2
85°	26.0	3.9	3.9	3.9	2.6
87.5°	3.9	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)