

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: P1059129

Luminaire Tested: S123RDR-S1165D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D927-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

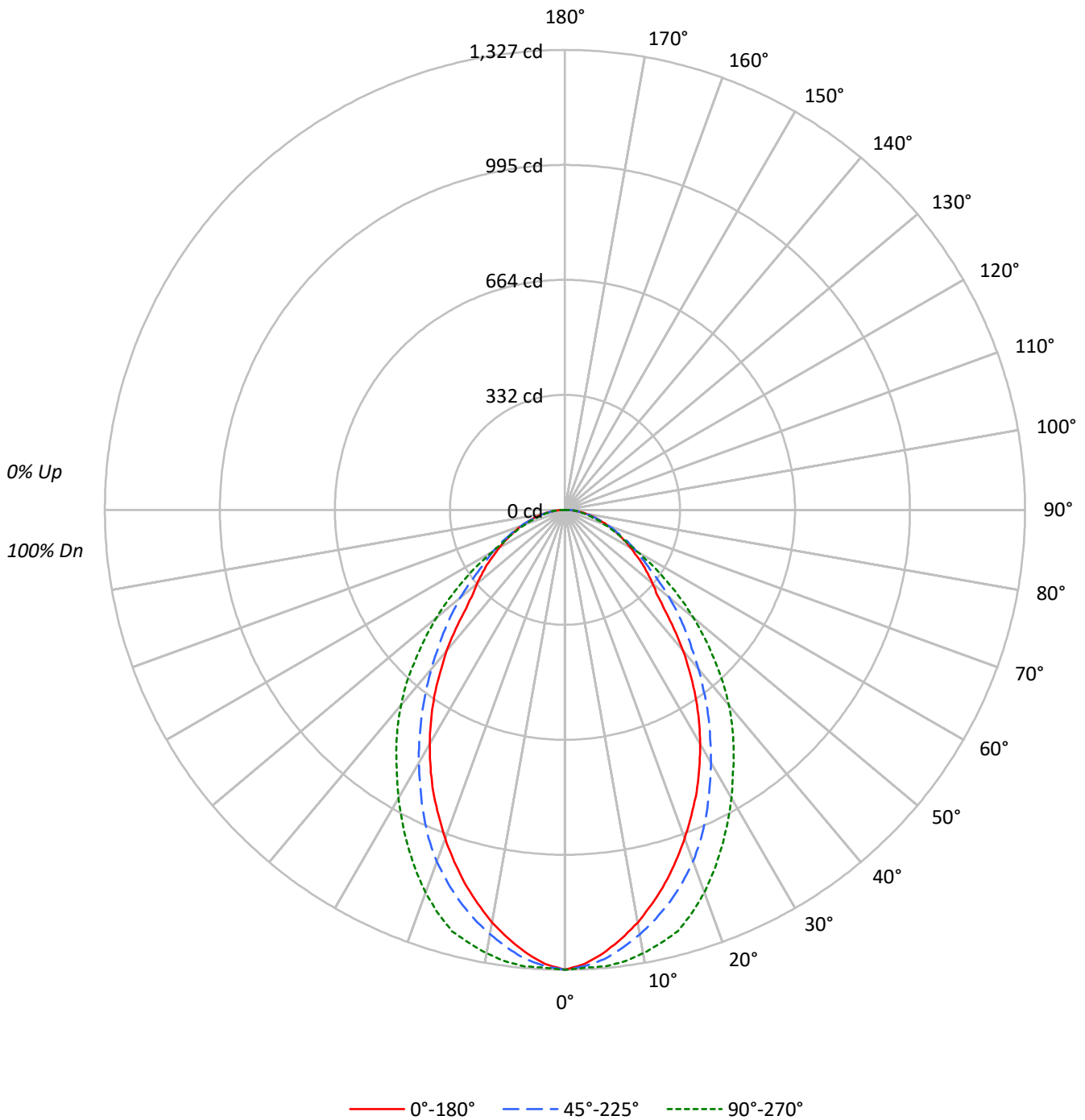
Lumens per Lamp: N/A
Luminaire Lumens: 2331.4 lumens
Efficiency: N/A
Efficacy: 55.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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: P1059129

CATALOG NUMBER: S123RDR-S1165D927-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059129

CATALOG NUMBER: S123RDR-S1165D927-X4F0-XX-UDD-WVL-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	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	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15580	15580	15580
5°	15128	15344	15585
10°	14418	14826	15494
15°	13562	14228	15297
20°	12614	13498	14682
25°	11643	12516	13876
30°	10575	11426	13021
35°	9411	10311	12162
40°	8121	9190	11271
45°	6712	8134	10107
50°	6028	7176	8823
55°	5587	6125	7317
60°	5148	5578	5603
65°	4790	5043	4696
70°	4508	4587	4116
75°	4247	4092	3625
80°	4017	3706	3395
85°	3840	4150	3840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10107 cd/sqm



TEST NUMBER: P1059129

CATALOG NUMBER: S123RDR-S1165D927-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.9	5.3
10°-20°	331.1	14.2
20°-30°	447.9	19.2
30°-40°	460.2	19.7
40°-50°	386.5	16.6
50°-60°	277.1	11.9
60°-70°	176.4	7.6
70°-80°	96.9	4.2
80°-90°	32.3	1.4
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°	901.8	38.7
0°-40°	1362.1	58.4
0°-60°	2025.7	86.9
0°-90°	2331.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2331.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1283	1306	1302	1311	1322	120
15°	1116	1146	1170	1221	1258	313
25°	899	933	966	1018	1071	412
35°	656	692	719	783	848	409
45°	404	440	490	561	609	319
55°	273	279	299	339	357	244
65°	172	183	182	171	169	172
75°	94	103	90	83	80	100
85°	28	30	31	32	28	31
90°	0	0	0	0	0	



TEST NUMBER: P1059129

CATALOG NUMBER: S123RDR-S1165D927-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1326.8	1326.8	1326.8	1326.8	1326.8
2.5°	1312.0	1330.2	1317.7	1318.8	1322.2
5°	1283.4	1306.2	1301.7	1310.8	1322.2
7.5°	1248.0	1273.1	1274.3	1296.0	1314.2
10°	1209.2	1235.4	1243.4	1276.6	1299.4
12.5°	1163.5	1192.1	1209.2	1250.3	1280.0
15°	1115.6	1146.4	1170.4	1220.6	1258.3
17.5°	1063.0	1096.1	1127.0	1180.6	1219.5
20°	1009.4	1044.8	1080.2	1130.4	1174.9
22.5°	953.4	990.0	1026.5	1075.6	1124.7
25°	898.6	932.9	966.0	1018.5	1071.0
27.5°	839.2	874.6	903.2	961.4	1016.2
30°	779.9	815.3	842.7	903.2	960.3
32.5°	718.2	754.7	779.9	842.7	902.0
35°	656.5	691.9	719.3	783.3	848.4
37.5°	591.5	630.3	657.7	729.6	793.6
40°	529.8	566.3	599.5	674.8	735.3
42.5°	465.9	503.5	541.2	618.9	674.8
45°	404.2	439.6	489.8	560.6	608.6
47.5°	359.7	382.5	440.7	500.1	545.8
50°	330.0	339.1	392.8	445.3	483.0
52.5°	300.3	307.1	343.7	391.6	420.2
55°	272.9	278.6	299.2	339.1	357.4
57.5°	243.2	248.9	266.0	288.9	299.2
60°	219.2	223.8	237.5	240.9	238.6
62.5°	195.3	202.1	209.0	201.0	197.5
65°	172.4	182.7	181.5	171.3	169.0
67.5°	151.9	162.1	156.4	146.2	142.7
70°	131.3	141.6	133.6	123.3	119.9
72.5°	111.9	123.3	110.8	101.6	99.3
75°	93.6	102.8	90.2	83.4	79.9
77.5°	76.5	83.4	71.9	66.2	63.9
80°	59.4	63.9	54.8	51.4	50.2
82.5°	43.4	45.7	40.0	42.2	41.1
85°	28.5	29.7	30.8	32.0	28.5
87.5°	13.7	19.4	19.4	18.3	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)