

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: P1059162

Luminaire Tested: S123RDR-S1165D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059162
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

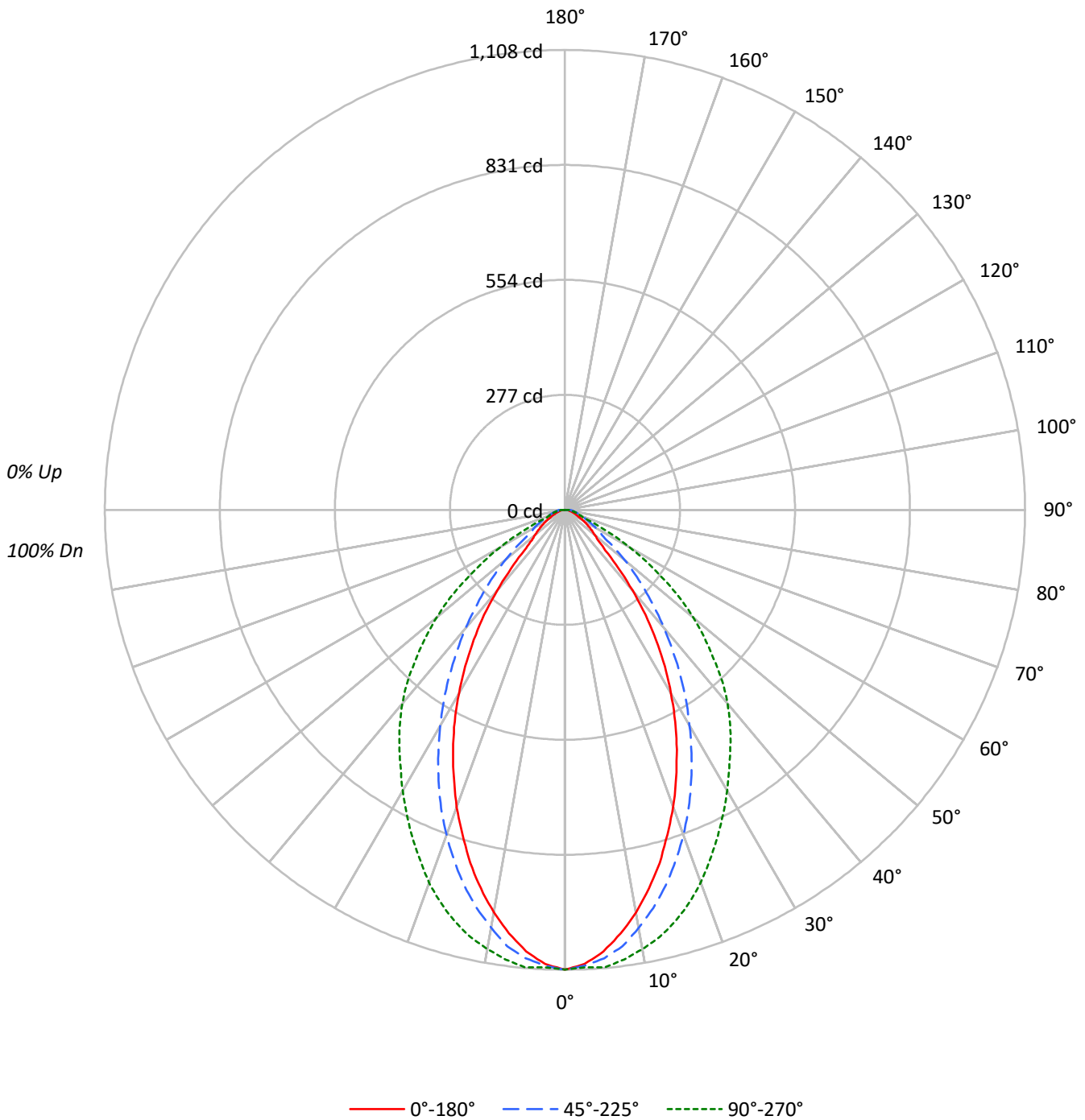
Lumens per Lamp: N/A
Luminaire Lumens: 1486.9 lumens
Efficiency: N/A
Efficacy: 35.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58				58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13006	13006	13006
5°	12585	12780	13040
10°	11747	12189	12813
15°	10705	11391	12478
20°	9526	10419	11950
25°	8254	9323	11267
30°	6922	8134	10596
35°	5483	6924	9960
40°	3881	5695	9343
45°	2285	4502	8408
50°	1710	3418	7364
55°	1437	2309	5914
60°	1163	1970	4201
65°	917	1681	2217
70°	803	1466	1370
75°	749	1375	1311
80°	744	1488	1305
85°	930	2223	1671

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8408 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.9	6.9
10°-20°	264.9	17.8
20°-30°	337.4	22.7
30°-40°	317.4	21.3
40°-50°	228.6	15.4
50°-60°	132.0	8.9
60°-70°	60.4	4.1
70°-80°	30.1	2.0
80°-90°	14.2	1.0
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°	704.2	47.4
0°-40°	1021.6	68.7
0°-60°	1382.2	93.0
0°-90°	1486.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1486.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1068	1086	1084	1095	1106	99
15°	881	912	937	989	1026	245
25°	637	670	720	799	870	291
35°	382	416	483	594	695	237
45°	138	172	271	407	506	116
55°	70	73	113	215	289	63
65°	33	47	60	67	80	34
75°	16	32	30	29	29	18
85°	7	15	16	15	12	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1107.6	1107.6	1107.6	1107.6	1107.6
2.5°	1095.2	1109.0	1099.4	1100.7	1103.5
5°	1067.7	1085.6	1084.2	1095.2	1106.3
7.5°	1029.2	1049.8	1060.8	1077.4	1092.5
10°	985.2	1008.6	1022.3	1052.6	1074.6
12.5°	934.3	964.5	982.4	1022.3	1054.0
15°	880.6	912.2	937.0	989.3	1026.4
17.5°	820.1	854.5	886.1	948.0	993.4
20°	762.3	795.3	833.8	901.2	956.3
22.5°	699.0	734.8	778.8	850.3	912.2
25°	637.1	670.1	719.6	799.4	869.6
27.5°	575.1	608.2	660.4	748.5	825.6
30°	510.5	544.9	599.9	697.6	781.5
32.5°	447.2	480.2	542.1	648.1	736.1
35°	382.5	415.5	483.0	594.4	694.8
37.5°	319.2	353.6	425.2	550.4	653.6
40°	253.2	290.3	371.5	505.0	609.5
42.5°	191.3	231.2	317.8	458.2	561.4
45°	137.6	172.0	271.1	407.3	506.3
47.5°	107.3	125.2	228.4	355.0	455.4
50°	93.6	96.3	187.1	306.8	403.1
52.5°	81.2	83.9	147.2	261.4	348.1
55°	70.2	72.9	112.8	214.6	288.9
57.5°	59.2	63.3	93.6	170.6	232.5
60°	49.5	55.0	83.9	130.7	178.9
62.5°	39.9	49.5	71.5	96.3	128.0
65°	33.0	46.8	60.5	67.4	79.8
67.5°	27.5	42.7	50.9	48.2	46.8
70°	23.4	38.5	42.7	38.5	39.9
72.5°	19.3	35.8	35.8	33.0	33.0
75°	16.5	31.6	30.3	28.9	28.9
77.5°	13.8	27.5	26.1	24.8	23.4
80°	11.0	22.0	22.0	20.6	19.3
82.5°	9.6	17.9	17.9	17.9	15.1
85°	6.9	15.1	16.5	15.1	12.4
87.5°	5.5	13.8	13.8	12.4	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)