

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: P1059084

Luminaire Tested: S123RDR-S1000D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059084
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-S1000D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

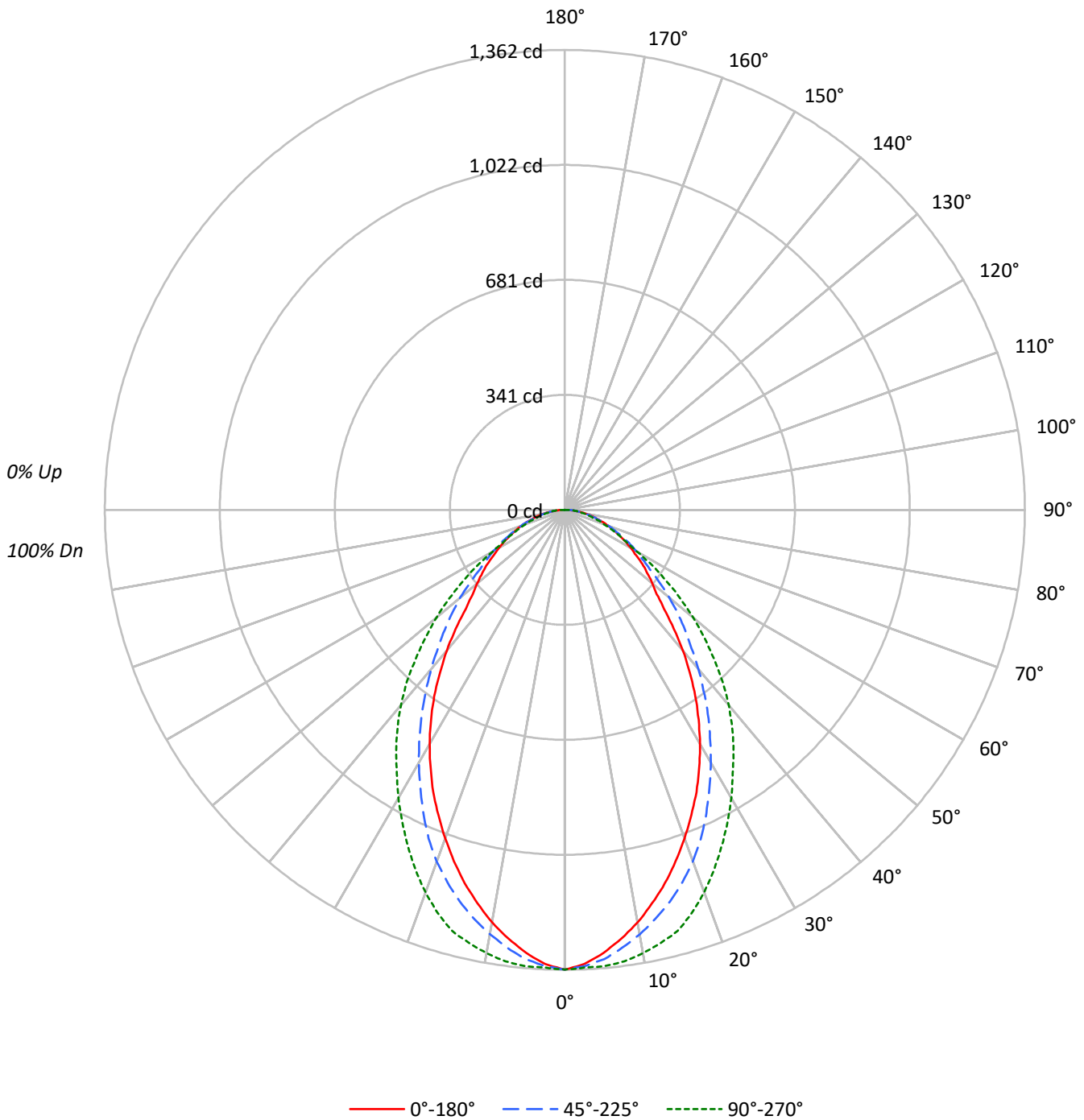
Lumens per Lamp: N/A
Luminaire Lumens: 2392.4 lumens
Efficiency: N/A
Efficacy: 68.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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°	15987	15987	15987
5°	15523	15744	15993
10°	14795	15213	15898
15°	13916	14600	15697
20°	12942	13851	15065
25°	11947	12842	14239
30°	10850	11724	13361
35°	9657	10581	12479
40°	8333	9429	11565
45°	6888	8346	10371
50°	6186	7364	9054
55°	5732	6285	7507
60°	5284	5723	5751
65°	4915	5176	4818
70°	4625	4707	4223
75°	4360	4201	3720
80°	4118	3800	3489
85°	3948	4257	3948

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10371 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.1	5.3
10°-20°	339.7	14.2
20°-30°	459.6	19.2
30°-40°	472.3	19.7
40°-50°	396.6	16.6
50°-60°	284.4	11.9
60°-70°	181.1	7.6
70°-80°	99.5	4.2
80°-90°	33.2	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°	925.4	38.7
0°-40°	1397.7	58.4
0°-60°	2078.7	86.9
0°-90°	2392.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2392.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1317	1340	1336	1345	1357	123
15°	1145	1176	1201	1252	1291	321
25°	922	957	991	1045	1099	423
35°	674	710	738	804	870	419
45°	415	451	503	575	624	327
55°	280	286	307	348	367	250
65°	177	188	186	176	173	176
75°	96	105	93	86	82	102
85°	29	30	32	33	29	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1361.5	1361.5	1361.5	1361.5	1361.5
2.5°	1346.2	1365.0	1352.1	1353.3	1356.8
5°	1316.9	1340.4	1335.7	1345.1	1356.8
7.5°	1280.6	1306.4	1307.6	1329.8	1348.6
10°	1240.8	1267.7	1275.9	1309.9	1333.3
12.5°	1193.9	1223.2	1240.8	1283.0	1313.4
15°	1144.7	1176.3	1201.0	1252.5	1291.2
17.5°	1090.8	1124.8	1156.4	1211.5	1251.3
20°	1035.7	1072.1	1108.4	1159.9	1205.6
22.5°	978.3	1015.8	1053.3	1103.7	1154.1
25°	922.1	957.2	991.2	1045.1	1099.0
27.5°	861.2	897.5	926.8	986.5	1042.8
30°	800.2	836.6	864.7	926.8	985.4
32.5°	737.0	774.5	800.2	864.7	925.6
35°	673.7	710.0	738.1	803.8	870.5
37.5°	606.9	646.8	674.9	748.7	814.3
40°	543.6	581.1	615.1	692.5	754.5
42.5°	478.0	516.7	555.4	635.0	692.5
45°	414.8	451.1	502.6	575.3	624.5
47.5°	369.1	392.5	452.3	513.2	560.1
50°	338.6	348.0	403.1	456.9	495.6
52.5°	308.1	315.2	352.7	401.9	431.2
55°	280.0	285.9	307.0	348.0	366.7
57.5°	249.6	255.4	273.0	296.4	307.0
60°	225.0	229.6	243.7	247.2	244.9
62.5°	200.4	207.4	214.4	206.2	202.7
65°	176.9	187.5	186.3	175.7	173.4
67.5°	155.8	166.4	160.5	150.0	146.5
70°	134.7	145.3	137.1	126.5	123.0
72.5°	114.8	126.5	113.7	104.3	101.9
75°	96.1	105.4	92.6	85.5	82.0
77.5°	78.5	85.5	73.8	68.0	65.6
80°	60.9	65.6	56.2	52.7	51.6
82.5°	44.5	46.9	41.0	43.4	42.2
85°	29.3	30.5	31.6	32.8	29.3
87.5°	14.1	19.9	19.9	18.7	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)