

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: P1058121

Luminaire Tested: S122RDR-S865D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D830-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

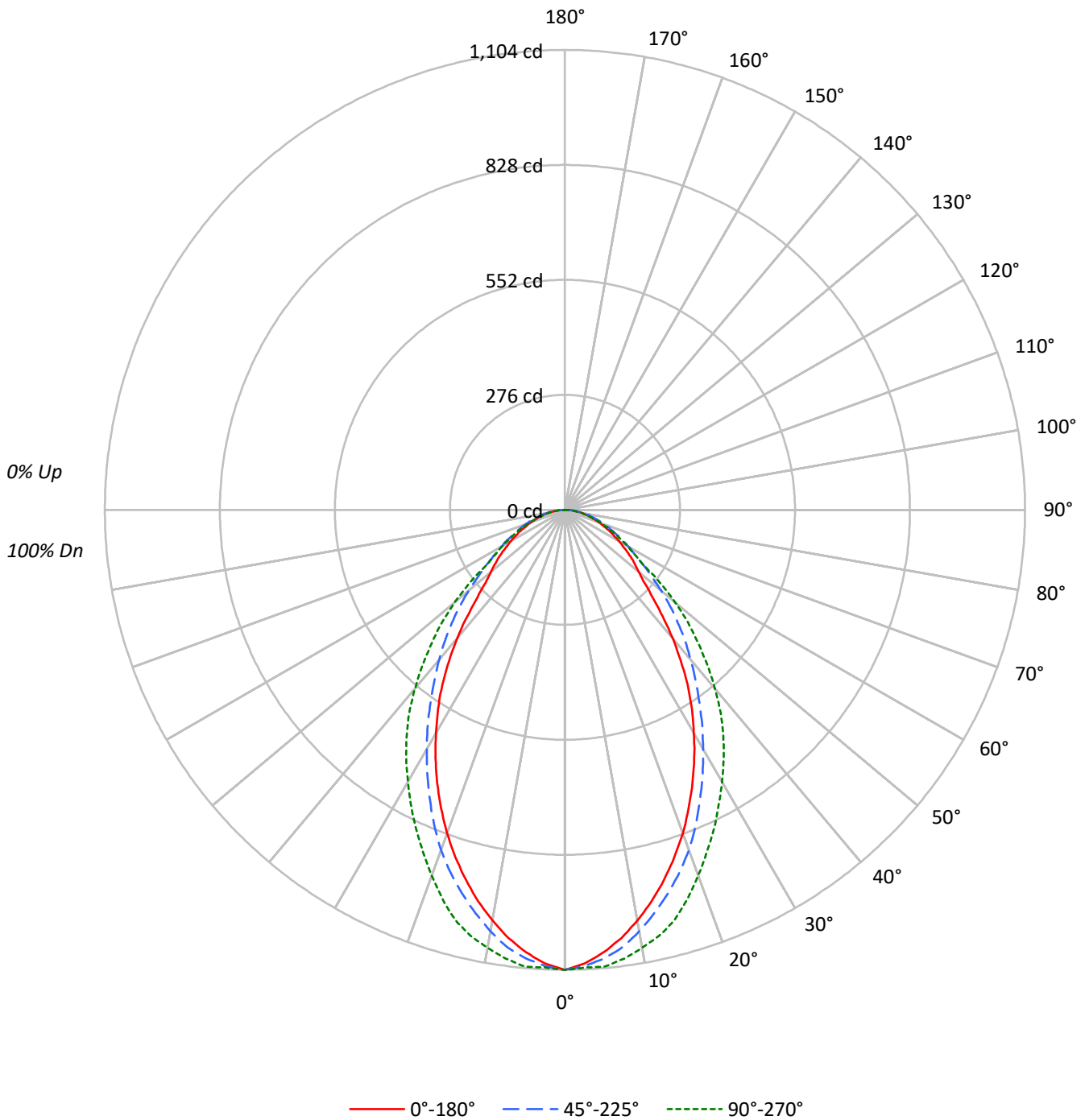
Lumens per Lamp: N/A
Luminaire Lumens: 1800.4 lumens
Efficiency: N/A
Efficacy: 51.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20377	20377	20377
5°	19751	20016	20390
10°	18756	19247	20002
15°	17558	18215	19463
20°	16230	17068	18351
25°	14749	15618	17214
30°	13183	14118	16066
35°	11556	12653	14926
40°	9669	11297	13472
45°	7748	10010	11774
50°	6649	8624	9887
55°	6074	7335	7296
60°	5521	6484	6355
65°	5030	5807	5549
70°	4613	5320	4931
75°	4320	4912	4320
80°	4038	4537	3783
85°	4023	4785	3260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11774 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.9	5.7
10°-20°	269.9	15.0
20°-30°	356.0	19.8
30°-40°	358.5	19.9
40°-50°	291.8	16.2
50°-60°	198.9	11.0
60°-70°	129.1	7.2
70°-80°	71.1	3.9
80°-90°	23.2	1.3
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°	727.8	40.4
0°-40°	1086.3	60.3
0°-60°	1577.0	87.6
0°-90°	1800.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1800.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1066	1086	1081	1090	1101	100
15°	919	943	954	993	1019	257
25°	724	748	767	802	846	332
35°	513	539	562	610	663	319
45°	297	334	384	417	451	234
55°	189	208	228	229	227	169
65°	115	137	133	126	127	115
75°	61	75	69	62	61	64
85°	19	25	23	18	15	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1104.3	1104.3	1104.3	1104.3	1104.3
2.5°	1090.1	1107.9	1096.0	1097.2	1099.6
5°	1066.3	1086.5	1080.6	1090.1	1100.8
7.5°	1036.7	1056.8	1059.2	1073.5	1086.5
10°	1001.0	1023.6	1027.2	1048.5	1067.5
12.5°	961.8	986.8	991.5	1022.4	1047.3
15°	919.1	942.8	953.5	992.7	1018.8
17.5°	874.0	896.5	913.2	948.8	978.5
20°	826.5	847.8	869.2	901.3	934.5
22.5°	775.4	799.2	819.4	851.4	889.4
25°	724.4	748.1	767.1	801.5	845.5
27.5°	672.1	695.9	714.9	751.7	799.2
30°	618.7	643.6	662.6	704.2	754.0
32.5°	566.4	591.4	612.7	656.7	708.9
35°	513.0	539.1	561.7	610.4	662.6
37.5°	456.0	485.7	514.2	562.9	613.9
40°	401.4	434.6	469.0	514.2	559.3
42.5°	346.7	383.6	426.3	464.3	505.9
45°	296.9	333.7	383.6	416.8	451.2
47.5°	257.7	288.6	342.0	369.3	400.2
50°	231.6	252.9	300.4	321.8	344.4
52.5°	210.2	228.0	261.2	275.5	287.4
55°	188.8	207.8	228.0	229.2	226.8
57.5°	167.4	188.8	199.5	191.2	195.9
60°	149.6	171.0	175.7	167.4	172.2
62.5°	130.6	154.4	154.4	146.1	148.4
65°	115.2	136.6	133.0	125.9	127.1
67.5°	99.7	121.1	115.2	108.1	108.1
70°	85.5	105.7	98.6	91.4	91.4
72.5°	72.4	89.1	84.3	76.0	74.8
75°	60.6	74.8	68.9	61.7	60.6
77.5°	48.7	60.6	55.8	49.9	47.5
80°	38.0	48.7	42.7	38.0	35.6
82.5°	28.5	36.8	32.1	27.3	24.9
85°	19.0	24.9	22.6	17.8	15.4
87.5°	9.5	16.6	14.2	11.9	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)