

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: P1058139

Luminaire Tested: S122RDR-S865D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058139
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-S865D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

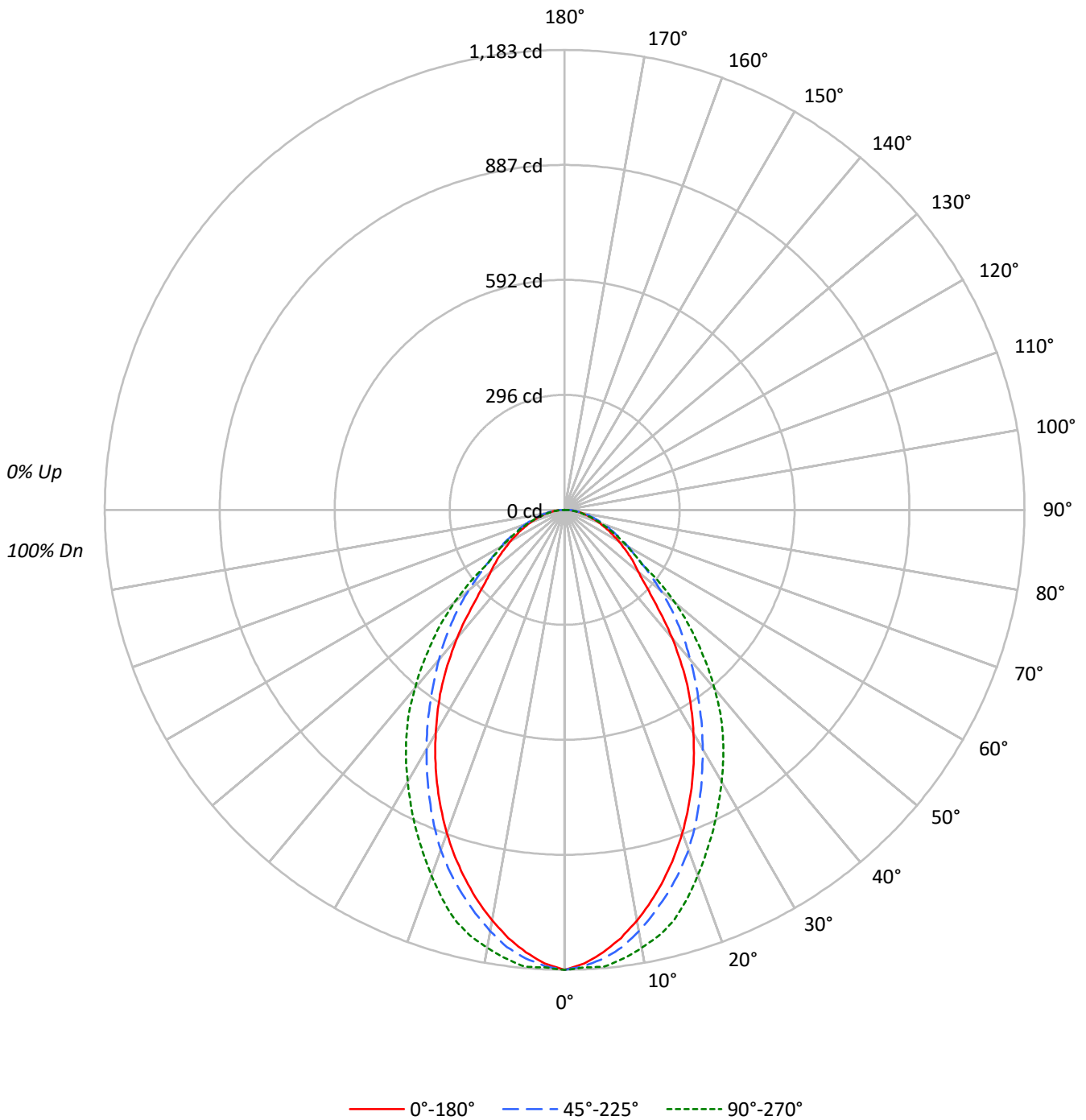
Lumens per Lamp: N/A
Luminaire Lumens: 1929.0 lumens
Efficiency: N/A
Efficacy: 55.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	99	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°	21833	21833	21833
5°	21162	21446	21846
10°	20096	20620	21432
15°	18811	19516	20853
20°	17388	18288	19662
25°	15801	16734	18444
30°	14124	15126	17214
35°	12380	13556	15991
40°	10358	12107	14434
45°	8301	10723	12617
50°	7122	9241	10593
55°	6508	7859	7818
60°	5916	6949	6809
65°	5388	6222	5942
70°	4942	5697	5287
75°	4627	5262	4627
80°	4325	4867	4059
85°	4319	5124	3493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12617 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	5.7
10°-20°	289.2	15.0
20°-30°	381.4	19.8
30°-40°	384.1	19.9
40°-50°	312.6	16.2
50°-60°	213.1	11.0
60°-70°	138.4	7.2
70°-80°	76.2	3.9
80°-90°	24.9	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°	779.8	40.4
0°-40°	1163.9	60.3
0°-60°	1689.6	87.6
0°-90°	1929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1929.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1183	1183	1183	1183	1183	
5°	1142	1164	1158	1168	1179	107
15°	985	1010	1022	1064	1092	276
25°	776	802	822	859	906	356
35°	550	578	602	654	710	341
45°	318	358	411	447	484	251
55°	202	223	244	246	243	181
65°	123	146	142	135	136	123
75°	65	80	74	66	65	69
85°	20	27	24	19	16	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1183.2	1183.2	1183.2	1183.2	1183.2
2.5°	1168.0	1187.0	1174.3	1175.6	1178.1
5°	1142.5	1164.1	1157.8	1168.0	1179.4
7.5°	1110.7	1132.3	1134.9	1150.1	1164.1
10°	1072.5	1096.7	1100.5	1123.4	1143.8
12.5°	1030.5	1057.3	1062.4	1095.4	1122.2
15°	984.7	1010.2	1021.6	1063.6	1091.6
17.5°	936.4	960.6	978.4	1016.6	1048.4
20°	885.5	908.4	931.3	965.7	1001.3
22.5°	830.8	856.2	877.9	912.2	952.9
25°	776.1	801.5	821.9	858.8	905.9
27.5°	720.1	745.6	765.9	805.4	856.2
30°	662.9	689.6	709.9	754.5	807.9
32.5°	606.9	633.6	656.5	703.6	759.6
35°	549.6	577.6	601.8	654.0	709.9
37.5°	488.6	520.4	550.9	603.1	657.8
40°	430.0	465.7	502.6	550.9	599.2
42.5°	371.5	410.9	456.7	497.5	542.0
45°	318.1	357.5	410.9	446.6	483.5
47.5°	276.1	309.2	366.4	395.7	428.8
50°	248.1	271.0	321.9	344.8	369.0
52.5°	225.2	244.3	279.9	295.2	307.9
55°	202.3	222.6	244.3	245.6	243.0
57.5°	179.4	202.3	213.7	204.8	209.9
60°	160.3	183.2	188.3	179.4	184.5
62.5°	140.0	165.4	165.4	156.5	159.0
65°	123.4	146.3	142.5	134.9	136.1
67.5°	106.9	129.8	123.4	115.8	115.8
70°	91.6	113.2	105.6	98.0	98.0
72.5°	77.6	95.4	90.3	81.4	80.2
75°	64.9	80.2	73.8	66.2	64.9
77.5°	52.2	64.9	59.8	53.4	50.9
80°	40.7	52.2	45.8	40.7	38.2
82.5°	30.5	39.4	34.4	29.3	26.7
85°	20.4	26.7	24.2	19.1	16.5
87.5°	10.2	17.8	15.3	12.7	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)