

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: P1058129

Luminaire Tested: S122RDR-S865D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

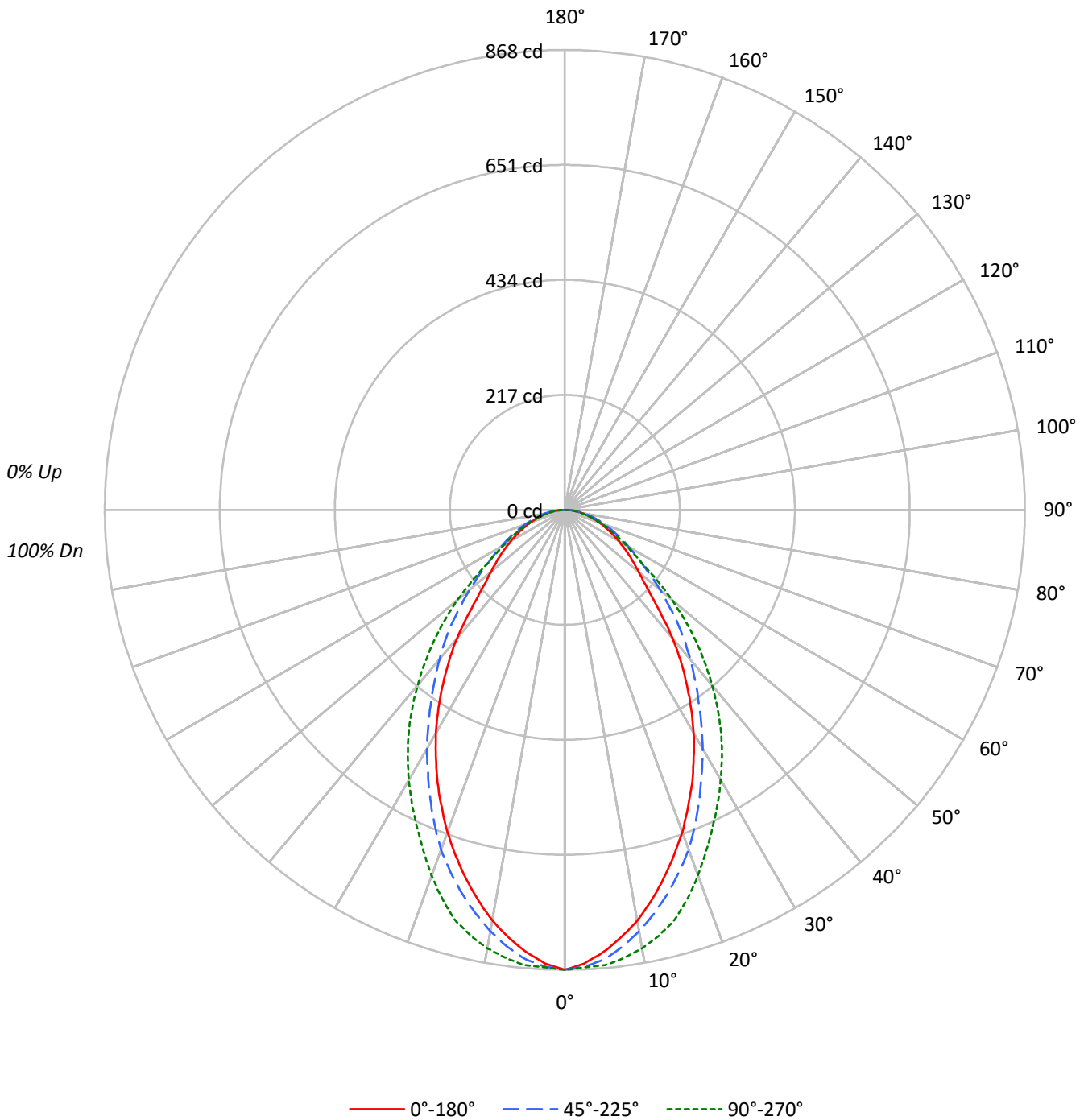
Lumens per Lamp: N/A
Luminaire Lumens: 1413.4 lumens
Efficiency: N/A
Efficacy: 40.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	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	45	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	45	39	35	45	39	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16017	16017	16017
5°	15519	15774	15983
10°	14754	15130	15745
15°	13766	14320	15306
20°	12715	13408	14423
25°	11569	12234	13440
30°	10362	11086	12535
35°	9024	9905	11579
40°	7617	8862	10408
45°	6049	7823	9107
50°	5207	6726	7559
55°	4742	5755	5794
60°	4325	5115	4927
65°	3960	4619	4344
70°	3669	4284	3874
75°	3415	4042	3415
80°	3209	3879	3082
85°	3197	4001	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9107 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	5.7
10°-20°	211.8	15.0
20°-30°	278.7	19.7
30°-40°	280.3	19.8
40°-50°	227.2	16.1
50°-60°	156.5	11.1
60°-70°	102.4	7.2
70°-80°	57.1	4.0
80°-90°	19.3	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°	570.7	40.4
0°-40°	851.0	60.2
0°-60°	1234.6	87.4
0°-90°	1413.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1413.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	838	854	852	855	863	78
15°	721	738	750	777	801	202
25°	568	583	601	627	660	260
35°	401	420	440	479	514	250
45°	232	258	300	326	349	183
55°	147	164	179	183	180	132
65°	91	108	106	101	100	91
75°	48	59	57	50	48	51
85°	15	20	19	16	13	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	868.0	868.0	868.0	868.0	868.0
2.5°	856.6	871.8	862.9	862.9	864.2
5°	837.8	854.1	851.6	855.4	862.9
7.5°	813.8	831.5	831.5	842.8	852.9
10°	787.4	805.0	807.5	825.2	840.3
12.5°	754.6	772.2	779.8	802.5	822.6
15°	720.6	738.2	749.6	777.3	801.2
17.5°	684.1	701.7	716.8	745.8	769.7
20°	647.5	663.9	682.8	708.0	734.5
22.5°	607.2	624.8	642.5	666.4	696.7
25°	568.2	583.3	600.9	627.4	660.1
27.5°	526.6	543.0	559.3	590.8	624.8
30°	486.3	502.7	520.3	553.0	588.3
32.5°	443.4	461.1	478.7	515.2	551.8
35°	400.6	419.5	439.7	478.7	514.0
37.5°	359.0	379.2	403.1	443.4	473.7
40°	316.2	337.6	367.9	403.1	432.1
42.5°	270.9	297.3	333.8	364.1	390.5
45°	231.8	258.3	299.8	326.3	349.0
47.5°	202.8	224.2	264.6	287.2	306.1
50°	181.4	197.8	234.3	250.7	263.3
52.5°	163.8	180.1	205.3	216.7	220.5
55°	147.4	163.8	178.9	182.7	180.1
57.5°	131.0	148.7	157.5	153.7	153.7
60°	117.2	136.1	138.6	133.5	133.5
62.5°	103.3	122.2	122.2	115.9	115.9
65°	90.7	108.3	105.8	100.8	99.5
67.5°	79.4	95.7	92.0	86.9	85.7
70°	68.0	83.1	79.4	73.1	71.8
72.5°	57.9	71.8	66.8	61.7	59.2
75°	47.9	59.2	56.7	50.4	47.9
77.5°	39.1	47.9	45.4	40.3	37.8
80°	30.2	37.8	36.5	31.5	29.0
82.5°	22.7	29.0	27.7	23.9	20.2
85°	15.1	20.2	18.9	16.4	12.6
87.5°	7.6	13.9	12.6	11.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)