

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S122RDRP-S865D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S122RDRP-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

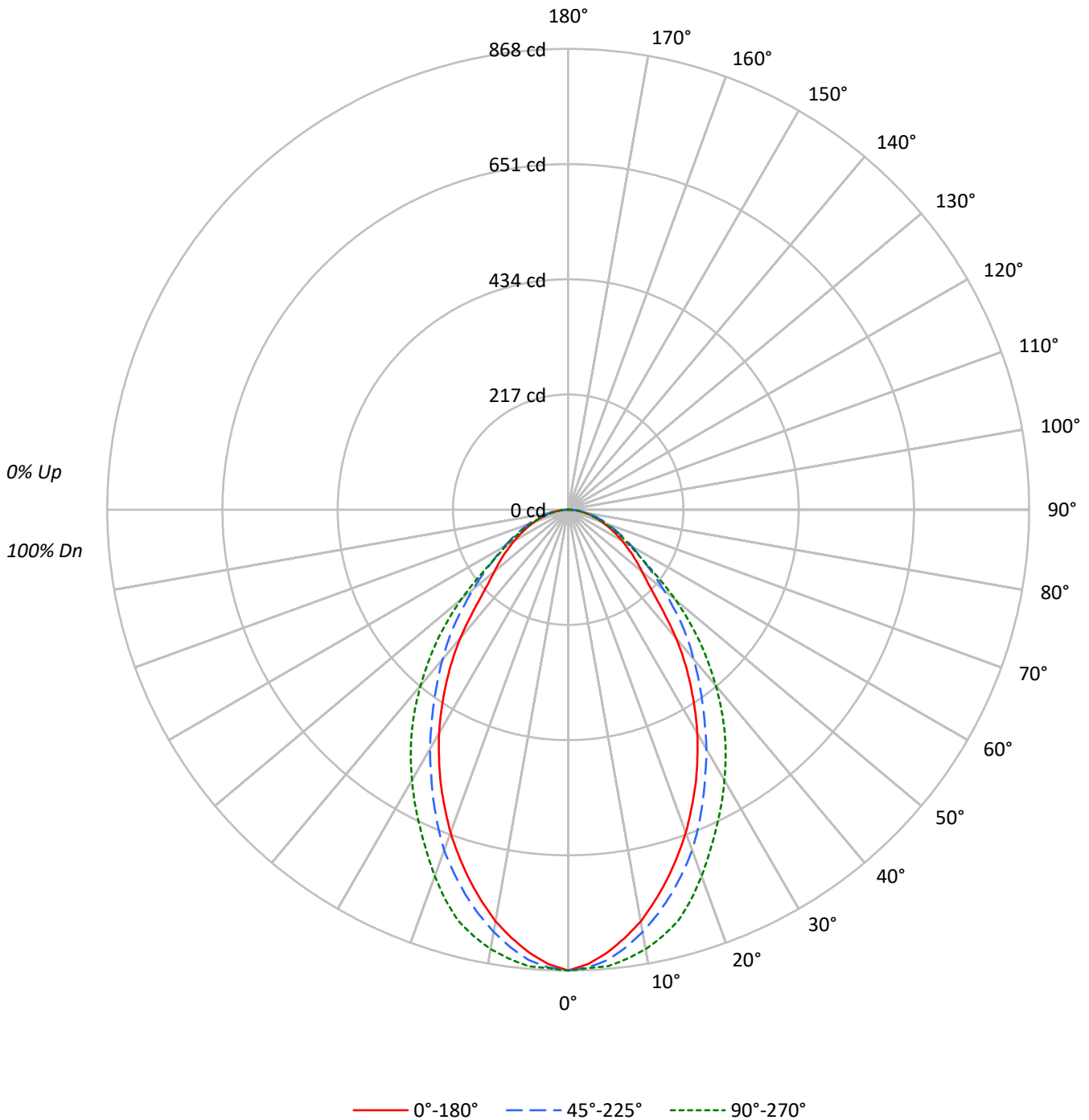
Lumens per Lamp: N/A
Luminaire Lumens: 1413.4 lumens
Efficiency: N/A
Efficacy: 40.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.37	17.81	16.73	18.12	18.44	16.73	18.17	17.09	18.48	18.79
	3H	17.91	19.20	18.29	19.53	19.89	18.07	19.36	18.45	19.69	20.05
	4H	18.48	19.69	18.88	20.04	20.42	18.55	19.76	18.96	20.11	20.49
	6H	18.91	20.03	19.33	20.40	20.79	18.91	20.02	19.32	20.39	20.78
	8H	19.07	20.13	19.49	20.52	20.92	19.03	20.09	19.45	20.48	20.88
	12H	19.18	20.20	19.61	20.58	21.01	19.10	20.12	19.53	20.50	20.93
4H	2H	16.95	18.16	17.35	18.51	18.89	17.24	18.45	17.64	18.80	19.18
	3H	18.77	19.78	19.19	20.18	20.58	18.81	19.81	19.22	20.22	20.62
	4H	19.52	20.42	19.95	20.84	21.28	19.42	20.32	19.85	20.74	21.18
	6H	20.11	20.89	20.57	21.33	21.80	19.90	20.68	20.36	21.13	21.59
	8H	20.32	21.05	20.78	21.50	21.96	20.06	20.80	20.53	21.24	21.71
	12H	20.49	21.14	20.97	21.62	22.09	20.19	20.84	20.67	21.32	21.79
8H	4H	19.81	20.54	20.27	20.98	21.45	19.72	20.45	20.18	20.90	21.36
	6H	20.56	21.17	21.06	21.66	22.14	20.34	20.94	20.84	21.43	21.91
	8H	20.89	21.43	21.40	21.94	22.43	20.59	21.13	21.10	21.64	22.13
	12H	21.17	21.65	21.68	22.14	22.71	20.80	21.28	21.31	21.77	22.34
12H	4H	19.82	20.48	20.31	20.96	21.43	19.75	20.41	20.24	20.89	21.36
	6H	20.62	21.17	21.14	21.68	22.17	20.41	20.96	20.93	21.47	21.96
	8H	21.02	21.50	21.53	21.99	22.56	20.73	21.21	21.24	21.71	22.27