

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: P1058174

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058174
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-S865D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

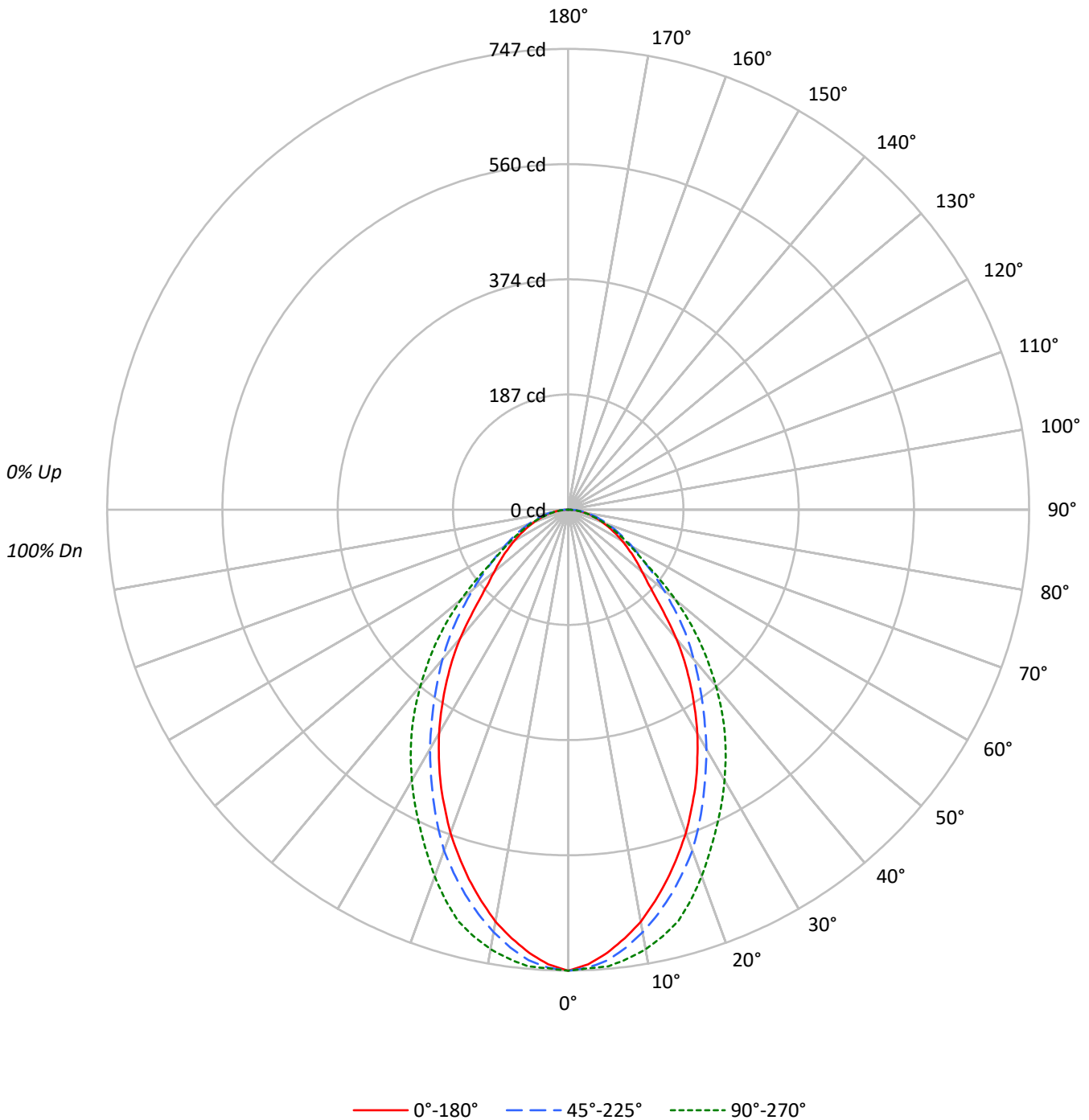
Lumens per Lamp: N/A
Luminaire Lumens: 1216.9 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				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°	13790	13790	13790
5°	13361	13581	13763
10°	12702	13028	13556
15°	11852	12329	13178
20°	10947	11544	12418
25°	9960	10534	11573
30°	8921	9546	10792
35°	7769	8526	9968
40°	6559	7629	8961
45°	5209	6738	7842
50°	4484	5790	6508
55°	4082	4954	4990
60°	3724	4403	4244
65°	3410	3978	3742
70°	3162	3685	3334
75°	2937	3479	2937
80°	2763	3347	2646
85°	2752	3451	2287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	5.7
10°-20°	182.4	15.0
20°-30°	240.0	19.7
30°-40°	241.3	19.8
40°-50°	195.6	16.1
50°-60°	134.7	11.1
60°-70°	88.2	7.2
70°-80°	49.1	4.0
80°-90°	16.6	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°	491.4	40.4
0°-40°	732.7	60.2
0°-60°	1063.0	87.4
0°-90°	1216.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1216.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	721	735	733	736	743	67
15°	620	636	645	669	690	174
25°	489	502	517	540	568	224
35°	345	361	378	412	442	215
45°	200	222	258	281	300	158
55°	127	141	154	157	155	114
65°	78	93	91	87	86	78
75°	41	51	49	43	41	44
85°	13	17	16	14	11	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	747.3	747.3	747.3	747.3	747.3
2.5°	737.6	750.6	743.0	743.0	744.1
5°	721.3	735.4	733.2	736.5	743.0
7.5°	700.7	715.9	715.9	725.6	734.3
10°	677.9	693.1	695.3	710.5	723.5
12.5°	649.7	664.9	671.4	690.9	708.3
15°	620.4	635.6	645.4	669.2	689.8
17.5°	589.0	604.2	617.2	642.1	662.7
20°	557.5	571.6	587.9	609.6	632.4
22.5°	522.8	538.0	553.2	573.8	599.8
25°	489.2	502.2	517.4	540.2	568.4
27.5°	453.4	467.5	481.6	508.7	538.0
30°	418.7	432.8	448.0	476.2	506.5
32.5°	381.8	397.0	412.2	443.6	475.1
35°	344.9	361.2	378.5	412.2	442.5
37.5°	309.1	326.5	347.1	381.8	407.8
40°	272.3	290.7	316.7	347.1	372.0
42.5°	233.2	256.0	287.4	313.5	336.2
45°	199.6	222.4	258.2	280.9	300.5
47.5°	174.6	193.1	227.8	247.3	263.6
50°	156.2	170.3	201.7	215.8	226.7
52.5°	141.0	155.1	176.8	186.6	189.8
55°	126.9	141.0	154.0	157.3	155.1
57.5°	112.8	128.0	135.6	132.3	132.3
60°	100.9	117.1	119.3	115.0	115.0
62.5°	88.9	105.2	105.2	99.8	99.8
65°	78.1	93.3	91.1	86.8	85.7
67.5°	68.3	82.4	79.2	74.8	73.8
70°	58.6	71.6	68.3	62.9	61.8
72.5°	49.9	61.8	57.5	53.1	51.0
75°	41.2	51.0	48.8	43.4	41.2
77.5°	33.6	41.2	39.0	34.7	32.5
80°	26.0	32.5	31.5	27.1	24.9
82.5°	19.5	24.9	23.9	20.6	17.4
85°	13.0	17.4	16.3	14.1	10.8
87.5°	6.5	11.9	10.8	9.8	5.4
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	15.85	17.29	16.21	17.60	17.91	16.20	17.64	16.57	17.96	18.27
	3H	17.39	18.68	17.77	19.01	19.37	17.55	18.84	17.93	19.17	19.53
	4H	17.96	19.17	18.36	19.52	19.90	18.03	19.24	18.43	19.59	19.97
	6H	18.39	19.51	18.80	19.87	20.27	18.39	19.50	18.80	19.87	20.26
	8H	18.54	19.60	18.97	19.99	20.40	18.50	19.56	18.93	19.95	20.36
	12H	18.66	19.67	19.09	20.06	20.49	18.58	19.59	19.01	19.97	20.40
4H	2H	16.43	17.64	16.83	17.99	18.37	16.72	17.93	17.12	18.28	18.66
	3H	18.25	19.25	18.66	19.66	20.06	18.29	19.29	18.70	19.69	20.10
	4H	19.00	19.90	19.43	20.32	20.76	18.90	19.80	19.33	20.21	20.65
	6H	19.59	20.37	20.05	20.81	21.28	19.38	20.16	19.84	20.60	21.07
	8H	19.80	20.53	20.26	20.97	21.44	19.54	20.27	20.01	20.72	21.19
	12H	19.96	20.62	20.45	21.10	21.57	19.66	20.31	20.15	20.79	21.27
8H	4H	19.28	20.02	19.75	20.46	20.93	19.20	19.93	19.66	20.37	20.84
	6H	20.04	20.64	20.54	21.14	21.62	19.81	20.42	20.31	20.91	21.39
	8H	20.36	20.91	20.88	21.42	21.91	20.06	20.61	20.58	21.12	21.61
	12H	20.65	21.13	21.16	21.62	22.19	20.27	20.75	20.79	21.25	21.81
12H	4H	19.30	19.96	19.79	20.44	20.91	19.23	19.88	19.72	20.36	20.84
	6H	20.10	20.64	20.62	21.16	21.64	19.89	20.43	20.41	20.95	21.44
	8H	20.50	20.98	21.01	21.47	22.04	20.21	20.69	20.72	21.18	21.75