

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: P1060260

Luminaire Tested: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060260
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

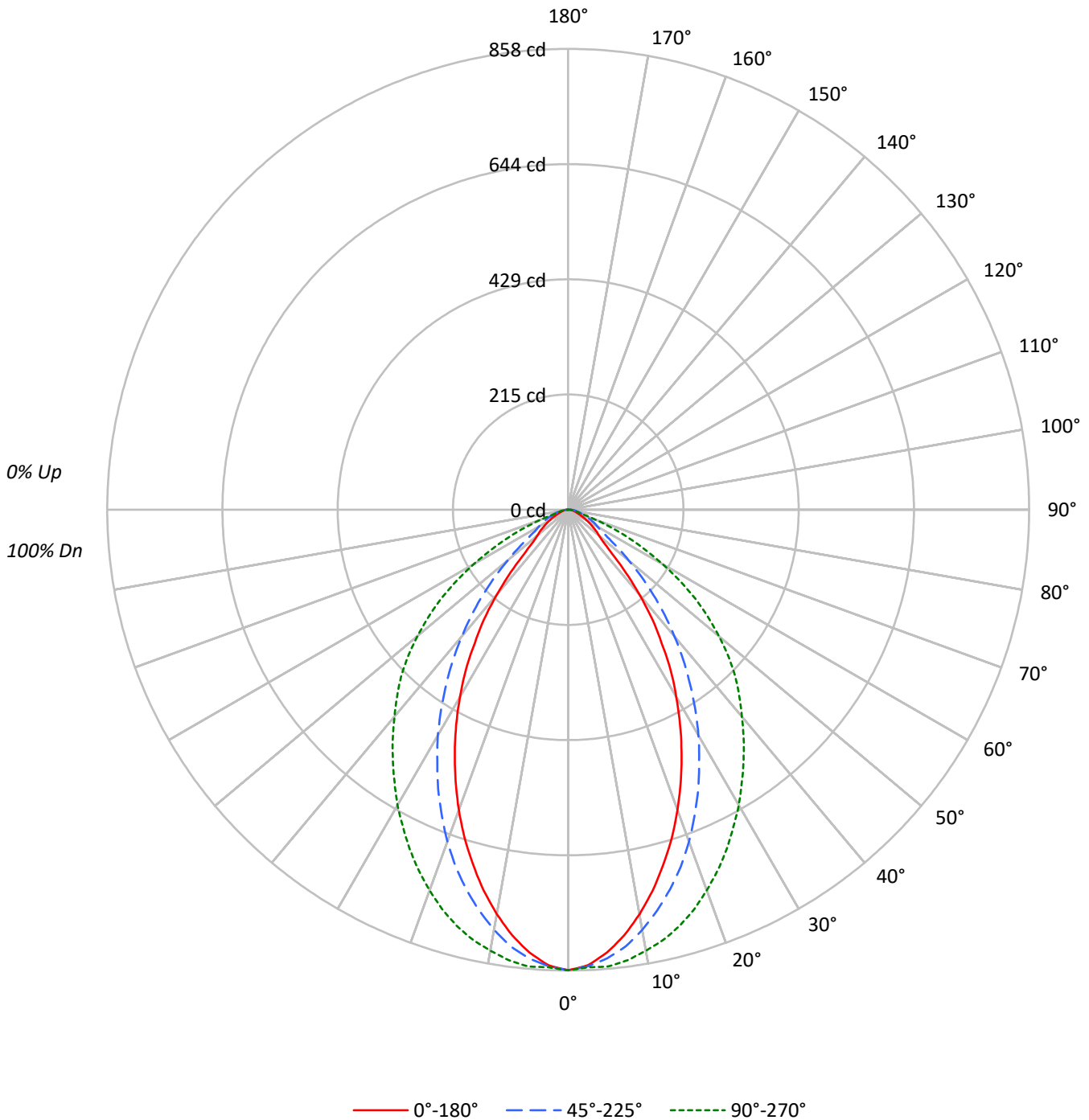
Lumens per Lamp: N/A
Luminaire Lumens: 1213.6 lumens
Efficiency: N/A
Efficacy: 34.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7384	7384	7384
5°	7156	7246	7379
10°	6686	6945	7289
15°	6099	6526	7149
20°	5452	6023	6909
25°	4743	5443	6627
30°	4001	4821	6316
35°	3183	4149	5983
40°	2316	3458	5654
45°	1400	2730	5356
50°	1001	1976	4903
55°	848	1338	4330
60°	692	1088	3498
65°	546	976	2518
70°	458	821	1327
75°	416	765	669
80°	426	759	664
85°	563	1136	761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5356 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	6.5
10°-20°	206.9	17.0
20°-30°	268.3	22.1
30°-40°	258.3	21.3
40°-50°	192.1	15.8
50°-60°	118.2	9.7
60°-70°	58.0	4.8
70°-80°	22.6	1.9
80°-90°	10.3	0.9
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°	554.1	45.7
0°-40°	812.4	66.9
0°-60°	1122.7	92.5
0°-90°	1213.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	828	840	838	846	854	77
15°	684	706	732	776	802	191
25°	499	526	573	645	698	228
35°	303	332	395	493	569	189
45°	115	143	224	346	440	95
55°	56	58	89	203	288	51
65°	27	29	48	77	124	28
75°	12	22	23	21	20	14
85°	6	10	12	12	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	857.5	857.5	857.5	857.5	857.5
2.5°	848.9	858.5	850.8	851.8	852.7
5°	827.8	840.3	838.3	846.0	853.7
7.5°	799.1	813.4	820.1	835.5	846.0
10°	764.6	780.9	794.3	819.2	833.6
12.5°	726.2	745.4	764.6	798.1	820.1
15°	684.1	706.1	732.0	776.1	801.9
17.5°	641.0	663.0	696.5	747.3	779.9
20°	595.0	618.9	657.3	713.8	754.0
22.5°	547.1	572.9	615.1	679.3	727.2
25°	499.2	526.0	572.9	644.8	697.5
27.5°	451.3	477.1	527.9	608.4	665.9
30°	402.4	429.2	484.8	569.1	635.2
32.5°	355.5	380.4	439.8	531.8	601.7
35°	302.8	331.5	394.7	493.4	569.1
37.5°	257.7	283.6	351.6	455.1	536.5
40°	206.0	234.7	307.6	417.7	503.0
42.5°	158.1	186.8	265.4	380.4	471.4
45°	115.0	142.8	224.2	345.9	439.8
47.5°	87.2	103.5	184.0	312.3	404.3
50°	74.7	79.5	147.5	275.9	366.0
52.5°	66.1	68.0	115.0	239.5	327.7
55°	56.5	58.4	89.1	203.1	288.4
57.5°	47.9	48.9	71.9	168.6	246.2
60°	40.2	41.2	63.2	135.1	203.1
62.5°	33.5	34.5	56.5	104.4	161.9
65°	26.8	28.7	47.9	76.6	123.6
67.5°	22.0	25.9	40.2	53.7	86.2
70°	18.2	24.9	32.6	37.4	52.7
72.5°	15.3	23.0	27.8	26.8	25.9
75°	12.5	22.0	23.0	21.1	20.1
77.5°	10.5	19.2	19.2	17.2	16.3
80°	8.6	15.3	15.3	15.3	13.4
82.5°	7.7	12.5	13.4	13.4	10.5
85°	5.7	10.5	11.5	11.5	7.7
87.5°	3.8	9.6	10.5	9.6	5.7
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	6.73	8.08	7.10	8.39	8.70	15.90	17.24	16.26	17.55	17.87
	3H	7.84	9.04	8.22	9.36	9.73	16.41	17.60	16.78	17.93	18.29
	4H	8.36	9.47	8.76	9.82	10.21	16.43	17.54	16.83	17.89	18.27
	6H	8.79	9.81	9.21	10.18	10.58	16.44	17.46	16.85	17.83	18.22
	8H	8.98	9.95	9.41	10.34	10.75	16.44	17.41	16.87	17.80	18.20
	12H	9.17	10.09	9.60	10.47	10.90	16.44	17.37	16.87	17.75	18.18
4H	2H	7.88	8.99	8.28	9.34	9.72	15.79	16.90	16.19	17.25	17.63
	3H	9.22	10.13	9.63	10.53	10.93	16.38	17.29	16.79	17.69	18.10
	4H	9.95	10.76	10.39	11.18	11.63	16.44	17.25	16.87	17.67	18.11
	6H	10.56	11.26	11.02	11.71	12.17	16.51	17.22	16.98	17.66	18.13
	8H	10.80	11.46	11.27	11.91	12.38	16.54	17.20	17.01	17.65	18.12
	12H	11.04	11.62	11.52	12.10	12.58	16.58	17.17	17.07	17.65	18.12
8H	4H	10.42	11.08	10.89	11.52	11.99	16.40	17.05	16.87	17.50	17.97
	6H	11.27	11.80	11.77	12.30	12.78	16.52	17.06	17.03	17.56	18.04
	8H	11.68	12.16	12.20	12.67	13.17	16.61	17.09	17.13	17.60	18.10
	12H	12.10	12.52	12.61	13.02	13.59	16.73	17.16	17.24	17.65	18.22
12H	4H	10.47	11.05	10.96	11.54	12.01	16.37	16.95	16.86	17.43	17.91
	6H	11.40	11.88	11.92	12.40	12.89	16.51	16.99	17.03	17.50	18.00
	8H	11.92	12.35	12.44	12.85	13.42	16.64	17.07	17.15	17.56	18.13