

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: P1060275

Luminaire Tested: S124RDRP-S1020D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

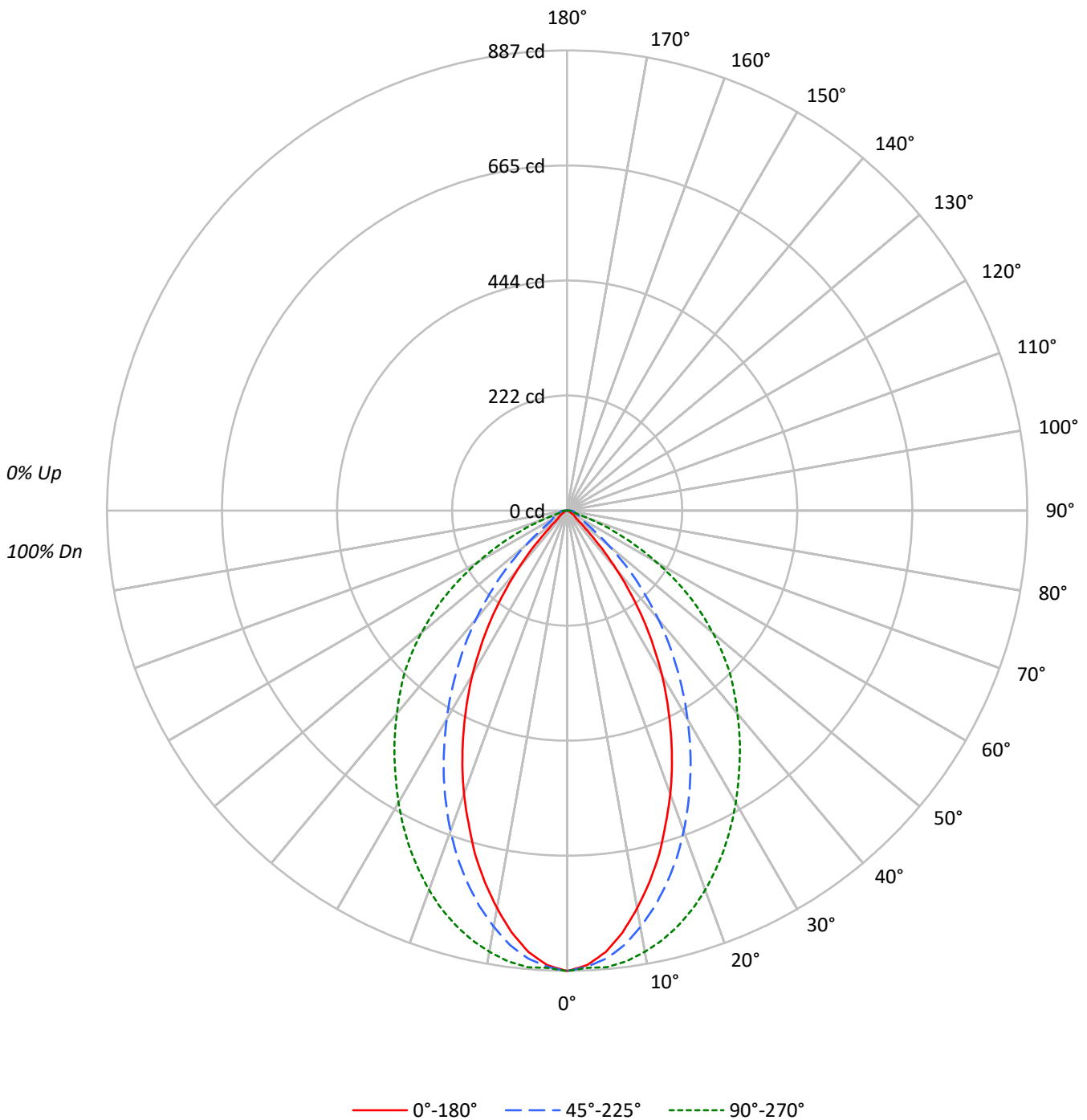
Lumens per Lamp: N/A
Luminaire Lumens: 1118.5 lumens
Efficiency: N/A
Efficacy: 32.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7642	7642	7642
5°	7383	7491	7635
10°	6804	7122	7550
15°	6110	6620	7382
20°	5326	6022	7130
25°	4493	5344	6818
30°	3625	4619	6462
35°	2683	3865	6099
40°	1663	3079	5737
45°	660	2246	5403
50°	293	1409	4911
55°	234	736	4300
60°	162	556	3426
65°	106	552	2355
70°	106	499	1100
75°	140	486	486
80°	208	570	570
85°	415	1136	820

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5403 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	7.3
10°-20°	210.1	18.8
20°-30°	265.2	23.7
30°-40°	243.3	21.8
40°-50°	165.7	14.8
50°-60°	90.3	8.1
60°-70°	39.1	3.5
70°-80°	14.3	1.3
80°-90°	9.2	0.8
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°	556.7	49.8
0°-40°	800.0	71.5
0°-60°	1056.0	94.4
0°-90°	1118.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1118.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	887	887	887	887	887	
5°	854	866	867	876	883	79
15°	685	709	743	796	828	191
25°	473	506	562	652	718	216
35°	255	293	368	484	580	158
45°	54	91	184	327	444	50
55°	16	17	49	180	286	14
65°	5	7	27	56	116	6
75°	4	14	15	15	15	4
85°	4	9	12	12	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	887.4	887.4	887.4	887.4	887.4
2.5°	877.0	887.4	880.1	882.2	882.2
5°	854.1	865.6	866.6	876.0	883.3
7.5°	819.7	836.4	844.7	863.5	876.0
10°	778.1	797.8	814.5	846.8	863.5
12.5°	733.3	756.2	781.2	823.9	847.8
15°	685.4	709.3	742.6	795.8	828.1
17.5°	632.2	661.4	702.0	765.6	805.1
20°	581.2	610.4	657.2	729.1	778.1
22.5°	528.1	558.3	610.4	690.6	748.9
25°	472.9	506.2	562.5	652.0	717.6
27.5°	418.7	454.1	513.5	611.4	684.3
30°	364.6	400.0	464.5	569.7	649.9
32.5°	309.3	345.8	415.6	526.0	614.5
35°	255.2	292.7	367.7	484.3	580.2
37.5°	200.0	239.6	319.8	443.7	545.8
40°	147.9	187.5	273.9	403.1	510.4
42.5°	99.0	138.5	227.1	363.5	477.0
45°	54.2	90.6	184.4	327.1	443.7
47.5°	29.2	50.0	142.7	291.6	406.2
50°	21.9	27.1	105.2	254.1	366.6
52.5°	18.7	20.8	72.9	214.6	327.1
55°	15.6	16.7	49.0	180.2	286.4
57.5°	12.5	13.5	36.5	145.8	242.7
60°	9.4	11.5	32.3	112.5	198.9
62.5°	7.3	9.4	30.2	82.3	157.3
65°	5.2	7.3	27.1	56.2	115.6
67.5°	5.2	8.3	22.9	36.5	78.1
70°	4.2	11.5	19.8	24.0	43.7
72.5°	4.2	12.5	16.7	16.7	16.7
75°	4.2	13.5	14.6	14.6	14.6
77.5°	4.2	12.5	13.5	12.5	12.5
80°	4.2	11.5	11.5	11.5	11.5
82.5°	4.2	10.4	11.5	11.5	9.4
85°	4.2	9.4	11.5	11.5	8.3
87.5°	3.1	9.4	10.4	10.4	6.2
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	0.00	0.00	0.00	0.00	0.00	15.47	16.75	15.84	17.06	17.38
	3H	0.00	0.65	0.00	0.98	1.35	15.85	16.98	16.23	17.31	17.68
	4H	0.75	1.80	1.15	2.15	2.54	15.83	16.88	16.23	17.23	17.62
	6H	1.94	2.91	2.36	3.28	3.67	15.82	16.78	16.23	17.15	17.55
	8H	2.54	3.45	2.97	3.84	4.25	15.82	16.73	16.25	17.12	17.53
	12H	3.21	4.09	3.64	4.47	4.90	15.83	16.70	16.26	17.09	17.52
4H	2H	1.72	2.77	2.12	3.12	3.50	15.28	16.34	15.69	16.69	17.07
	3H	3.31	4.16	3.72	4.57	4.97	15.70	16.56	16.12	16.97	17.37
	4H	4.60	5.36	5.03	5.78	6.23	15.70	16.47	16.14	16.89	17.33
	6H	5.73	6.39	6.19	6.84	7.31	15.74	16.41	16.21	16.85	17.32
	8H	6.24	6.86	6.71	7.31	7.78	15.77	16.39	16.24	16.84	17.31
	12H	6.80	7.34	7.28	7.83	8.30	15.84	16.38	16.32	16.87	17.34
8H	4H	5.68	6.30	6.15	6.75	7.22	15.61	16.23	16.08	16.68	17.15
	6H	7.23	7.74	7.73	8.23	8.72	15.69	16.20	16.20	16.69	17.18
	8H	8.04	8.49	8.56	9.01	9.50	15.78	16.23	16.30	16.75	17.24
	12H	8.88	9.28	9.39	9.77	10.35	15.95	16.35	16.46	16.84	17.42
12H	4H	5.87	6.42	6.36	6.90	7.38	15.58	16.12	16.06	16.61	17.08
	6H	7.59	8.04	8.11	8.56	9.05	15.67	16.12	16.19	16.64	17.13
	8H	8.60	9.00	9.12	9.50	10.07	15.80	16.21	16.32	16.70	17.27