

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: P1060296

Luminaire Tested: S124RDRP-S1020D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060296
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-S1020D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

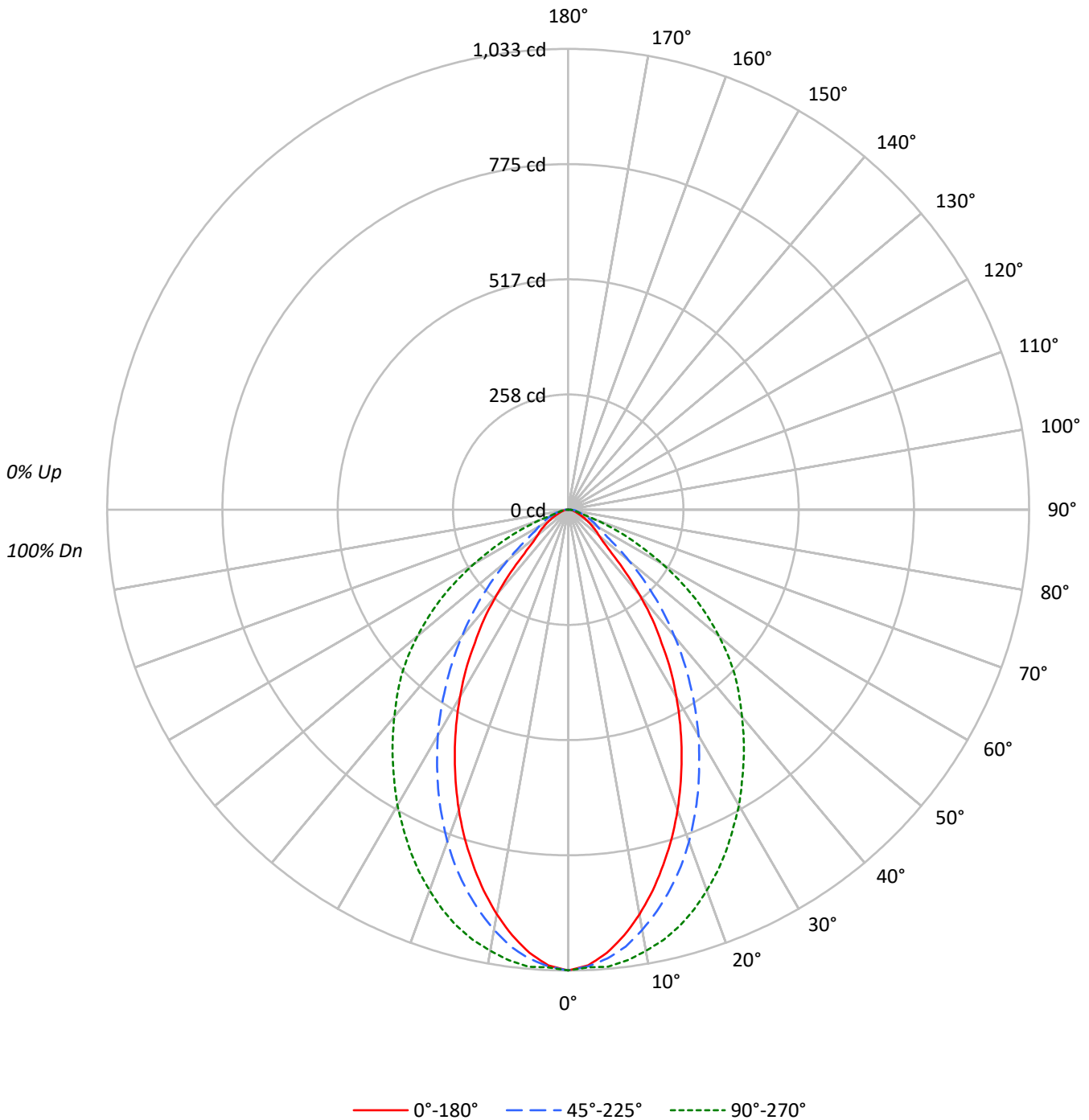
Lumens per Lamp: N/A
Luminaire Lumens: 1461.6 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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°	8893	8893	8893
5°	8617	8727	8887
10°	8051	8364	8777
15°	7344	7858	8609
20°	6566	7253	8322
25°	5711	6556	7981
30°	4819	5805	7607
35°	3833	4998	7205
40°	2789	4164	6810
45°	1687	3288	6449
50°	1206	2381	5905
55°	1022	1611	5214
60°	835	1312	4213
65°	658	1176	3032
70°	551	987	1599
75°	499	922	805
80°	516	917	803
85°	682	1363	909

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6449 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.1	6.5
10°-20°	249.1	17.0
20°-30°	323.1	22.1
30°-40°	311.0	21.3
40°-50°	231.4	15.8
50°-60°	142.3	9.7
60°-70°	69.9	4.8
70°-80°	27.3	1.9
80°-90°	12.4	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°	667.3	45.7
0°-40°	978.4	66.9
0°-60°	1352.0	92.5
0°-90°	1461.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1461.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	997	1012	1010	1019	1028	93
15°	824	850	882	935	966	230
25°	601	633	690	776	840	275
35°	365	399	475	594	685	228
45°	138	172	270	416	530	115
55°	68	70	107	245	347	61
65°	32	35	58	92	149	33
75°	15	26	28	25	24	16
85°	7	13	14	14	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1032.7	1032.7	1032.7	1032.7	1032.7
2.5°	1022.3	1033.8	1024.6	1025.7	1026.9
5°	996.9	1011.9	1009.6	1018.8	1028.1
7.5°	962.3	979.6	987.7	1006.1	1018.8
10°	920.8	940.4	956.5	986.5	1003.8
12.5°	874.6	897.7	920.8	961.1	987.7
15°	823.8	850.4	881.5	934.6	965.7
17.5°	771.9	798.4	838.8	900.0	939.2
20°	716.5	745.4	791.5	859.6	908.1
22.5°	658.8	690.0	740.8	818.1	875.8
25°	601.1	633.4	690.0	776.5	840.0
27.5°	543.5	574.6	635.8	732.7	801.9
30°	484.6	516.9	583.8	685.4	765.0
32.5°	428.1	458.1	529.6	640.4	724.6
35°	364.6	399.2	475.4	594.2	685.4
37.5°	310.4	341.5	423.5	548.1	646.1
40°	248.1	282.7	370.4	503.1	605.8
42.5°	190.4	225.0	319.6	458.1	567.7
45°	138.5	171.9	270.0	416.5	529.6
47.5°	105.0	124.6	221.5	376.1	486.9
50°	90.0	95.8	177.7	332.3	440.8
52.5°	79.6	81.9	138.5	288.5	394.6
55°	68.1	70.4	107.3	244.6	347.3
57.5°	57.7	58.8	86.5	203.1	296.5
60°	48.5	49.6	76.2	162.7	244.6
62.5°	40.4	41.5	68.1	125.8	195.0
65°	32.3	34.6	57.7	92.3	148.8
67.5°	26.5	31.2	48.5	64.6	103.8
70°	21.9	30.0	39.2	45.0	63.5
72.5°	18.5	27.7	33.5	32.3	31.2
75°	15.0	26.5	27.7	25.4	24.2
77.5°	12.7	23.1	23.1	20.8	19.6
80°	10.4	18.5	18.5	18.5	16.2
82.5°	9.2	15.0	16.2	16.2	12.7
85°	6.9	12.7	13.8	13.8	9.2
87.5°	4.6	11.5	12.7	11.5	6.9
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	7.37	8.71	7.74	9.03	9.34	16.55	17.89	16.91	18.20	18.52
	3H	8.48	9.68	8.86	10.01	10.37	17.05	18.24	17.43	18.57	18.94
	4H	9.00	10.11	9.41	10.46	10.85	17.07	18.18	17.47	18.53	18.92
	6H	9.44	10.46	9.85	10.83	11.22	17.08	18.10	17.50	18.47	18.87
	8H	9.63	10.60	10.06	10.99	11.39	17.09	18.05	17.52	18.44	18.85
	12H	9.81	10.73	10.24	11.12	11.55	17.09	18.01	17.52	18.40	18.83
4H	2H	8.52	9.63	8.92	9.98	10.36	16.44	17.55	16.84	17.90	18.28
	3H	9.86	10.77	10.27	11.17	11.58	17.03	17.94	17.44	18.34	18.74
	4H	10.59	11.41	11.03	11.83	12.27	17.09	17.90	17.52	18.32	18.76
	6H	11.21	11.91	11.67	12.35	12.82	17.16	17.86	17.62	18.31	18.78
	8H	11.45	12.10	11.92	12.55	13.02	17.19	17.85	17.66	18.29	18.77
	12H	11.68	12.26	12.17	12.75	13.22	17.23	17.81	17.72	18.30	18.77
8H	4H	11.06	11.72	11.53	12.17	12.64	17.04	17.70	17.51	18.15	18.62
	6H	11.92	12.45	12.42	12.95	13.43	17.17	17.71	17.67	18.20	18.69
	8H	12.32	12.80	12.84	13.32	13.81	17.26	17.74	17.78	18.25	18.75
	12H	12.74	13.17	13.26	13.67	14.24	17.38	17.80	17.89	18.30	18.87
12H	4H	11.12	11.70	11.60	12.18	12.65	17.02	17.60	17.50	18.08	18.55
	6H	12.05	12.53	12.57	13.05	13.54	17.15	17.64	17.67	18.15	18.64
	8H	12.57	13.00	13.08	13.49	14.06	17.29	17.71	17.80	18.21	18.78