

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: P1060272

Luminaire Tested: S124RDRP-S1020D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060272
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1020D930-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

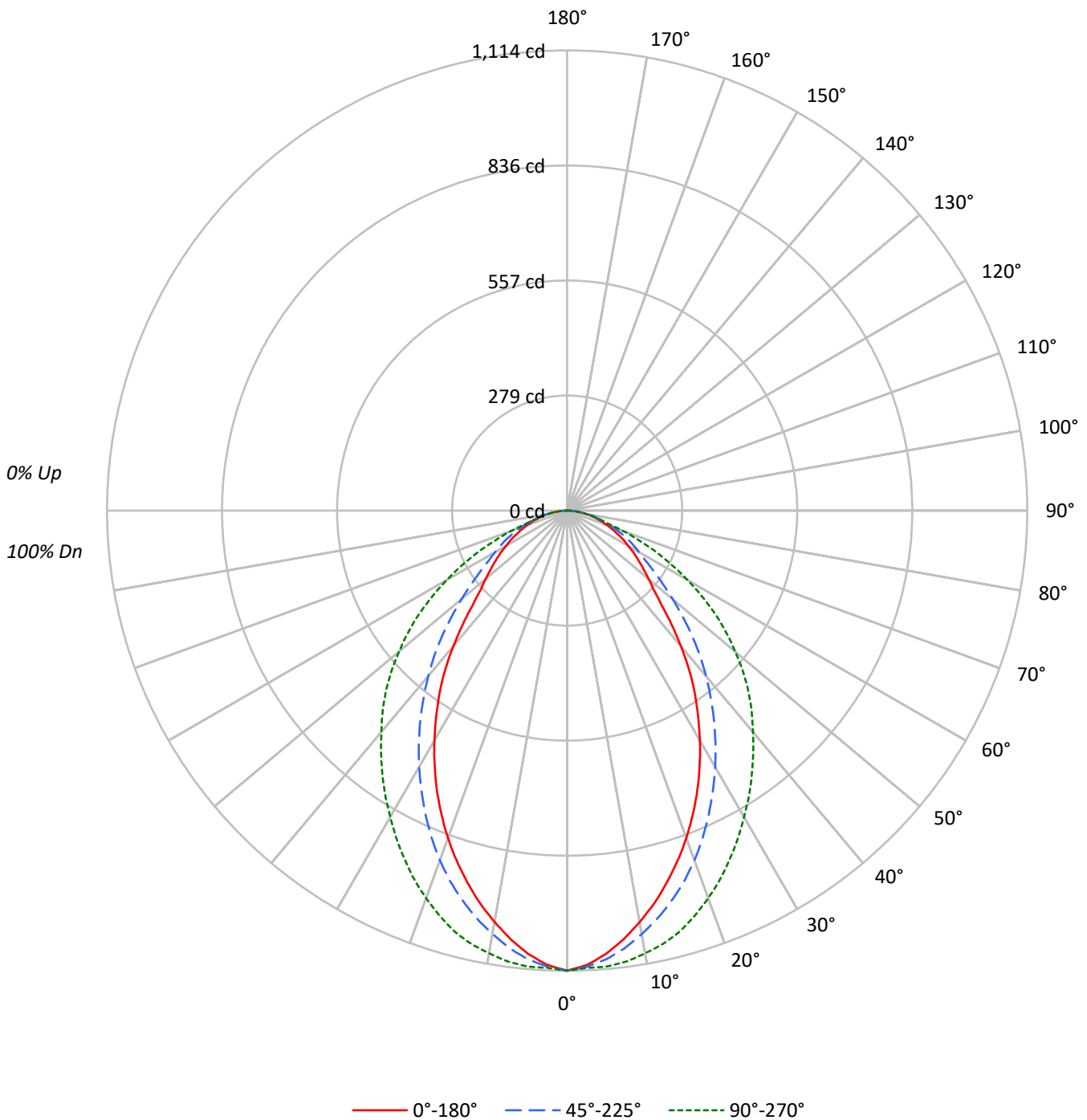
Lumens per Lamp: N/A
Luminaire Lumens: 2043.8 lumens
Efficiency: N/A
Efficacy: 58.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																			87									
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																			75									
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65																			65									
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57																			57									
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50																			50									
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45																			45									
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40																			40									
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37																			37									
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33																			33									
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31																			31									

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9591	9591	9591
5°	9313	9424	9577
10°	8843	9102	9515
15°	8313	8717	9403
20°	7731	8256	9150
25°	7090	7707	8850
30°	6391	7125	8517
35°	5658	6518	8196
40°	4809	5884	7866
45°	3937	5198	7563
50°	3447	4464	7118
55°	3166	3848	6585
60°	2936	3463	5806
65°	2751	3254	4860
70°	2581	2978	3648
75°	2425	2722	2655
80°	2246	2494	2246
85°	2045	2431	1946

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7563 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	5.0
10°-20°	277.0	13.6
20°-30°	378.6	18.5
30°-40°	397.9	19.5
40°-50°	345.3	16.9
50°-60°	260.4	12.7
60°-70°	168.8	8.3
70°-80°	86.6	4.2
80°-90°	26.3	1.3
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°	758.5	37.1
0°-40°	1156.3	56.6
0°-60°	1762.1	86.2
0°-90°	2043.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1114	1114	1114	1114	1114	
5°	1077	1092	1090	1099	1108	101
15°	932	955	978	1022	1055	261
25°	746	773	811	873	932	342
35°	538	568	620	703	780	335
45°	323	354	427	533	621	255
55°	211	217	256	364	439	190
65°	135	138	160	193	238	134
75°	73	82	82	83	80	77
85°	21	26	25	24	20	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1113.8	1113.8	1113.8	1113.8	1113.8
2.5°	1101.0	1114.8	1105.0	1106.9	1107.9
5°	1077.4	1092.1	1090.2	1099.0	1107.9
7.5°	1046.8	1064.5	1068.5	1086.2	1101.0
10°	1011.3	1031.0	1040.9	1069.5	1088.2
12.5°	973.9	993.6	1011.3	1047.8	1074.4
15°	932.5	955.1	977.8	1022.2	1054.7
17.5°	889.1	912.7	941.3	989.6	1028.1
20°	843.7	867.4	900.9	953.2	998.5
22.5°	795.4	822.1	857.5	913.7	967.0
25°	746.2	772.8	811.2	873.3	931.5
27.5°	694.9	722.5	763.9	832.9	895.0
30°	642.7	672.2	716.6	789.5	856.6
32.5°	589.4	621.0	668.3	746.2	819.1
35°	538.2	567.8	620.0	702.8	779.7
37.5°	485.0	514.5	570.7	660.4	740.2
40°	427.8	460.3	523.4	616.1	699.8
42.5°	374.6	407.1	475.1	573.7	661.4
45°	323.3	353.9	426.8	533.3	621.0
47.5°	283.9	305.6	378.5	493.8	577.6
50°	257.3	267.1	333.2	450.5	531.3
52.5°	233.6	241.5	291.8	407.1	485.9
55°	210.9	216.9	256.3	363.7	438.6
57.5°	191.2	194.2	224.7	320.3	387.4
60°	170.5	174.5	201.1	276.0	337.1
62.5°	153.8	155.7	180.4	233.6	286.8
65°	135.0	138.0	159.7	193.2	238.5
67.5°	118.3	123.2	138.0	157.7	188.3
70°	102.5	109.4	118.3	128.1	144.9
72.5°	87.7	95.6	100.5	104.5	101.5
75°	72.9	81.8	81.8	82.8	79.8
77.5°	59.1	67.0	66.0	65.1	61.1
80°	45.3	52.2	50.3	49.3	45.3
82.5°	33.5	38.4	36.5	35.5	30.6
85°	20.7	25.6	24.6	23.7	19.7
87.5°	9.9	14.8	13.8	12.8	8.9
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	14.36	15.85	14.72	16.16	16.47	18.10	19.58	18.46	19.90	20.21
	3H	16.03	17.36	16.40	17.69	18.05	19.22	20.55	19.60	20.88	21.24
	4H	16.69	17.94	17.09	18.29	18.67	19.52	20.77	19.92	21.12	21.49
	6H	17.20	18.35	17.61	18.72	19.11	19.72	20.87	20.13	21.24	21.63
	8H	17.37	18.47	17.80	18.86	19.26	19.77	20.87	20.20	21.26	21.66
	12H	17.49	18.54	17.92	18.93	19.35	19.81	20.86	20.24	21.24	21.67
4H	2H	15.15	16.40	15.55	16.75	17.13	18.26	19.51	18.66	19.86	20.24
	3H	17.02	18.06	17.43	18.46	18.86	19.59	20.63	20.00	21.03	21.43
	4H	17.83	18.76	18.26	19.17	19.61	20.01	20.94	20.44	21.36	21.80
	6H	18.47	19.28	18.93	19.72	20.18	20.33	21.14	20.79	21.58	22.04
	8H	18.69	19.45	19.16	19.89	20.36	20.42	21.18	20.89	21.63	22.09
	12H	18.86	19.53	19.34	20.01	20.48	20.50	21.17	20.98	21.65	22.12
8H	4H	18.17	18.93	18.64	19.38	19.84	20.14	20.90	20.61	21.34	21.81
	6H	18.96	19.59	19.46	20.08	20.56	20.56	21.19	21.06	21.68	22.16
	8H	19.28	19.84	19.80	20.35	20.84	20.72	21.28	21.23	21.79	22.28
	12H	19.54	20.04	20.05	20.53	21.10	20.86	21.35	21.37	21.85	22.41
12H	4H	18.20	18.88	18.69	19.36	19.83	20.15	20.82	20.63	21.30	21.77
	6H	19.02	19.59	19.54	20.10	20.59	20.58	21.14	21.10	21.65	22.14
	8H	19.41	19.91	19.92	20.40	20.96	20.79	21.29	21.30	21.78	22.35