

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060767

Luminaire Tested: S124RDR-H1195D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060767
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: S124RDR-H1195D935-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

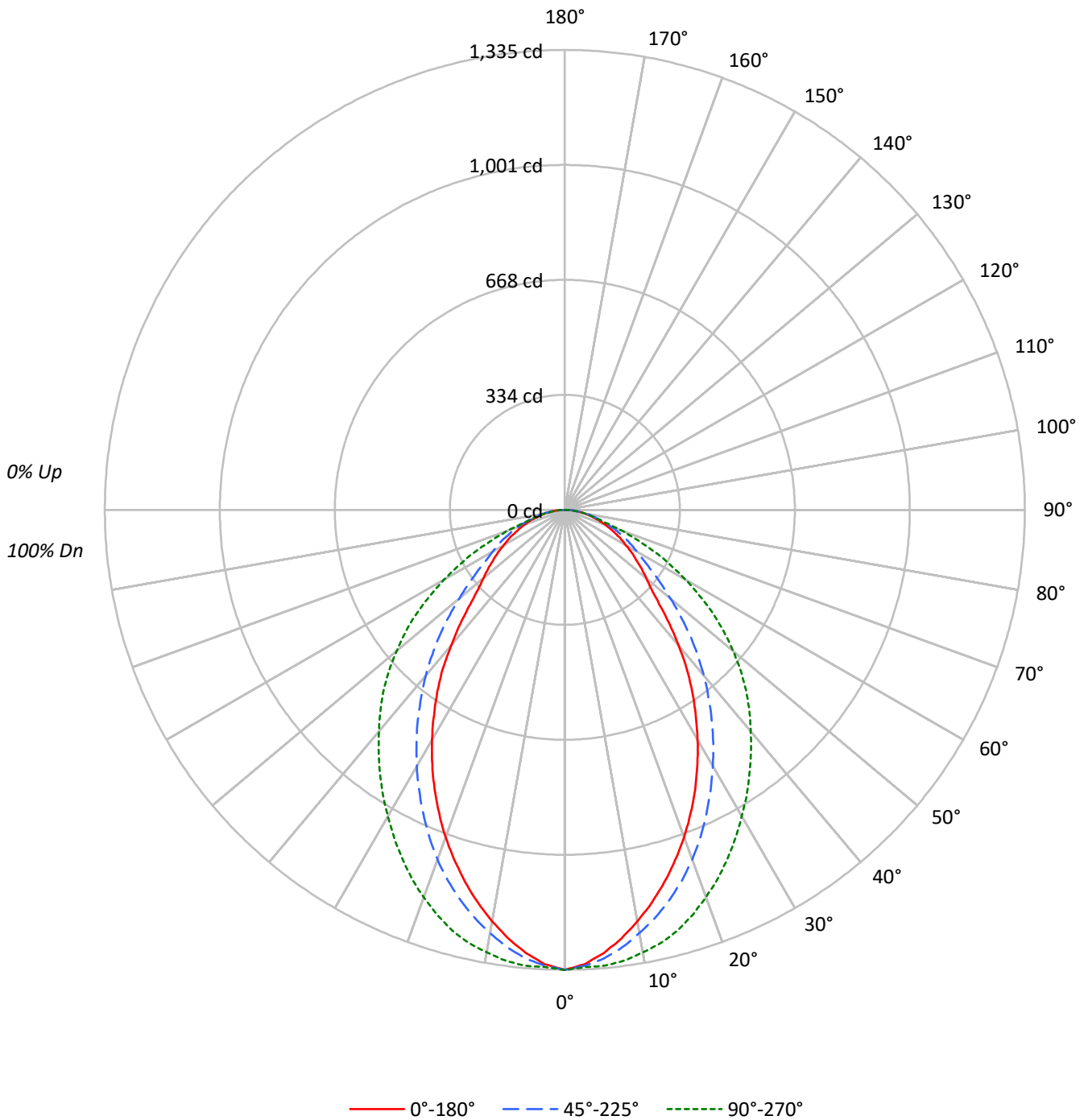
Lumens per Lamp: N/A
Luminaire Lumens: 2450.3 lumens
Efficiency: N/A
Efficacy: 67.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): 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									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																												
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																												
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																												
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65																												
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57																												
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50																												
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45																												
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40																												
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37																												
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33																												
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11499	11499	11499
5°	11165	11298	11482
10°	10602	10912	11407
15°	9966	10451	11273
20°	9270	9898	10970
25°	8500	9241	10610
30°	7661	8542	10211
35°	6783	7814	9826
40°	5766	7054	9431
45°	4720	6231	9067
50°	4131	5351	8534
55°	3797	4612	7895
60°	3520	4152	6961
65°	3299	3900	5827
70°	3094	3570	4373
75°	2908	3264	3184
80°	2698	2990	2698
85°	2450	2915	2332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9067 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	5.0
10°-20°	332.1	13.6
20°-30°	453.9	18.5
30°-40°	477.0	19.5
40°-50°	413.9	16.9
50°-60°	312.3	12.7
60°-70°	202.4	8.3
70°-80°	103.9	4.2
80°-90°	31.5	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°	909.3	37.1
0°-40°	1386.3	56.6
0°-60°	2112.5	86.2
0°-90°	2450.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2450.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1335	1335	1335	1335	1335	
5°	1292	1309	1307	1318	1328	121
15°	1118	1145	1172	1226	1264	313
25°	895	926	973	1047	1117	410
35°	645	681	743	843	935	401
45°	388	424	512	639	744	305
55°	253	260	307	436	526	228
65°	162	165	191	232	286	161
75°	87	98	98	99	96	93
85°	25	31	30	28	24	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1335.4	1335.4	1335.4	1335.4	1335.4
2.5°	1320.0	1336.5	1324.7	1327.1	1328.3
5°	1291.6	1309.4	1307.0	1317.6	1328.3
7.5°	1255.0	1276.3	1281.0	1302.3	1320.0
10°	1212.5	1236.1	1247.9	1282.2	1304.6
12.5°	1167.5	1191.2	1212.5	1256.2	1288.1
15°	1117.9	1145.1	1172.3	1225.5	1264.5
17.5°	1065.9	1094.3	1128.6	1186.5	1232.5
20°	1011.6	1039.9	1080.1	1142.7	1197.1
22.5°	953.7	985.6	1028.1	1095.5	1159.3
25°	894.6	926.5	972.6	1047.0	1116.7
27.5°	833.1	866.2	915.8	998.6	1073.0
30°	770.5	805.9	859.1	946.6	1026.9
32.5°	706.7	744.5	801.2	894.6	982.0
35°	645.2	680.7	743.3	842.6	934.7
37.5°	581.4	616.9	684.2	791.8	887.5
40°	512.9	551.9	627.5	738.6	839.0
42.5°	449.1	488.1	569.6	687.8	792.9
45°	387.6	424.2	511.7	639.3	744.5
47.5°	340.3	366.3	453.8	592.0	692.5
50°	308.4	320.2	399.4	540.1	637.0
52.5°	280.1	289.5	349.8	488.1	582.6
55°	252.9	260.0	307.2	436.1	525.9
57.5°	229.3	232.8	269.4	384.1	464.4
60°	204.4	209.2	241.1	330.9	404.2
62.5°	184.3	186.7	216.3	280.1	343.9
65°	161.9	165.4	191.4	231.6	286.0
67.5°	141.8	147.7	165.4	189.1	225.7
70°	122.9	131.2	141.8	153.6	173.7
72.5°	105.2	114.6	120.5	125.3	121.7
75°	87.4	98.1	98.1	99.3	95.7
77.5°	70.9	80.4	79.2	78.0	73.3
80°	54.4	62.6	60.3	59.1	54.4
82.5°	40.2	46.1	43.7	42.5	36.6
85°	24.8	30.7	29.5	28.4	23.6
87.5°	11.8	17.7	16.5	15.4	10.6
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	14.99	16.48	15.35	16.79	17.10	18.73	20.21	19.09	20.53	20.84
	3H	16.66	17.99	17.03	18.32	18.68	19.85	21.18	20.23	21.51	21.88
	4H	17.32	18.57	17.72	18.92	19.30	20.15	21.40	20.55	21.75	22.13
	6H	17.83	18.98	18.24	19.35	19.74	20.35	21.50	20.76	21.87	22.26
	8H	18.01	19.10	18.43	19.49	19.89	20.40	21.50	20.83	21.89	22.29
	12H	18.12	19.17	18.56	19.56	19.99	20.44	21.49	20.87	21.87	22.30
4H	2H	15.78	17.03	16.18	17.38	17.76	18.89	20.14	19.29	20.49	20.87
	3H	17.65	18.69	18.06	19.09	19.49	20.22	21.26	20.63	21.66	22.06
	4H	18.46	19.39	18.89	19.80	20.24	20.64	21.57	21.07	21.99	22.43
	6H	19.10	19.91	19.56	20.35	20.81	20.96	21.77	21.42	22.21	22.67
	8H	19.32	20.08	19.79	20.52	20.99	21.06	21.81	21.52	22.26	22.72
	12H	19.49	20.16	19.97	20.64	21.11	21.13	21.80	21.61	22.28	22.75
8H	4H	18.80	19.56	19.27	20.01	20.47	20.77	21.53	21.24	21.97	22.44
	6H	19.59	20.22	20.09	20.71	21.19	21.19	21.82	21.69	22.31	22.79
	8H	19.91	20.47	20.43	20.98	21.47	21.35	21.91	21.86	22.42	22.91
	12H	20.18	20.67	20.69	21.16	21.73	21.49	21.98	22.00	22.48	23.04
12H	4H	18.83	19.51	19.32	19.99	20.46	20.78	21.45	21.26	21.93	22.40
	6H	19.66	20.22	20.17	20.73	21.22	21.21	21.78	21.73	22.29	22.77
	8H	20.04	20.54	20.55	21.03	21.60	21.42	21.92	21.93	22.41	22.98