

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: P1060757

Luminaire Tested: S124RDR-H1195D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

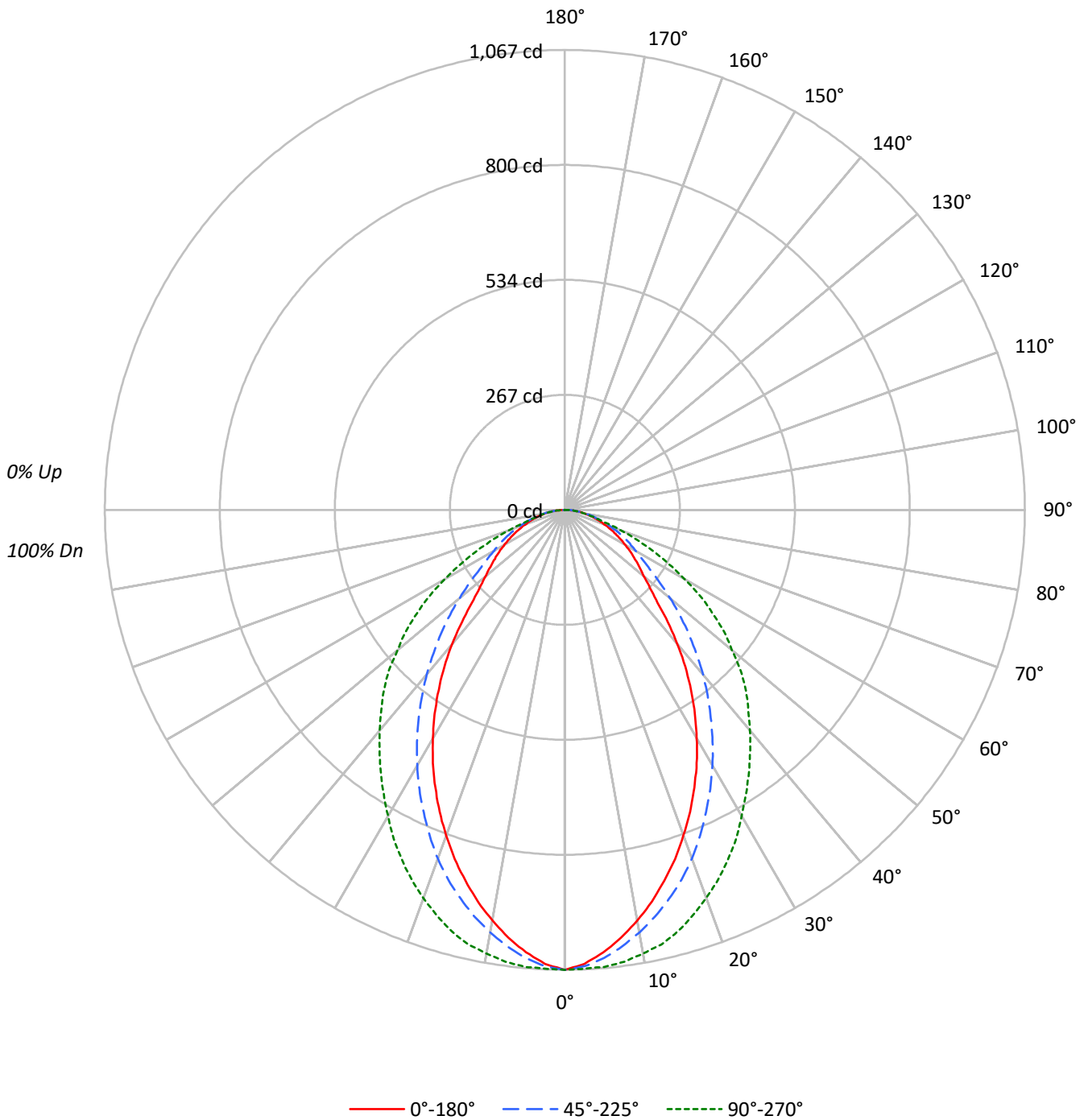
Lumens per Lamp: N/A
Luminaire Lumens: 1943.3 lumens
Efficiency: N/A
Efficacy: 53.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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									
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									100																			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87									87																			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75									75																			
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65									65																			
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57									57																			
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50									50																			
6	75	62	54	48	73	62	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	54	47	43	52	47	42	41									41																			
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37									37																			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34									34																			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31									31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9192	9192	9192
5°	8908	9023	9197
10°	8462	8707	9137
15°	7940	8329	9027
20°	7372	7895	8787
25°	6751	7357	8505
30°	6085	6808	8154
35°	5363	6211	7821
40°	4565	5597	7509
45°	3706	4945	7235
50°	3207	4257	6775
55°	2973	3612	6283
60°	2775	3257	5511
65°	2600	3054	4582
70°	2422	2817	3464
75°	2309	2605	2495
80°	2162	2385	2108
85°	1986	2213	1660

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7235 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.6	5.1
10°-20°	264.9	13.6
20°-30°	361.7	18.6
30°-40°	378.9	19.5
40°-50°	328.0	16.9
50°-60°	246.5	12.7
60°-70°	158.9	8.2
70°-80°	81.5	4.2
80°-90°	24.3	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°	725.1	37.3
0°-40°	1104.1	56.8
0°-60°	1678.5	86.4
0°-90°	1943.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1030	1046	1044	1052	1064	96
15°	891	913	934	977	1013	250
25°	710	737	774	835	895	326
35°	510	539	591	669	744	318
45°	304	336	406	506	594	240
55°	198	205	241	344	418	178
65°	128	130	150	181	225	127
75°	69	77	78	77	75	73
85°	20	24	22	21	17	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.4	1067.4	1067.4	1067.4	1067.4
2.5°	1054.0	1067.4	1059.6	1061.8	1065.2
5°	1030.5	1046.1	1043.9	1051.7	1064.0
7.5°	1001.4	1018.2	1021.5	1039.4	1057.3
10°	967.8	986.8	995.8	1022.6	1045.0
12.5°	930.9	951.0	966.7	1000.3	1032.7
15°	890.6	913.0	934.3	976.8	1012.6
17.5°	849.2	871.6	899.6	946.6	986.8
20°	804.5	829.1	861.5	910.8	958.9
22.5°	758.6	784.3	819.0	872.7	928.7
25°	710.5	737.3	774.3	834.7	895.1
27.5°	662.4	689.2	730.6	794.4	860.4
30°	612.0	640.0	684.7	754.1	820.1
32.5°	561.7	591.9	637.8	711.6	782.1
35°	510.2	539.3	590.8	669.1	744.0
37.5°	458.7	488.9	543.8	627.7	706.0
40°	406.1	437.5	497.9	586.3	668.0
42.5°	353.6	387.1	450.9	543.8	629.9
45°	304.3	335.7	406.1	505.7	594.1
47.5°	267.4	288.7	361.4	468.8	553.8
50°	239.4	250.6	317.8	428.5	505.7
52.5°	218.2	226.0	277.5	384.9	466.6
55°	198.0	204.8	240.6	343.5	418.5
57.5°	180.1	183.5	212.6	303.2	372.6
60°	161.1	164.5	189.1	259.6	320.0
62.5°	144.3	146.6	170.1	218.2	271.9
65°	127.6	129.8	149.9	181.3	224.9
67.5°	111.9	115.2	130.9	147.7	179.0
70°	96.2	102.9	111.9	119.7	137.6
72.5°	82.8	89.5	94.0	96.2	97.3
75°	69.4	77.2	78.3	77.2	75.0
77.5°	55.9	62.7	62.7	60.4	58.2
80°	43.6	49.2	48.1	45.9	42.5
82.5°	32.4	35.8	34.7	32.4	29.1
85°	20.1	23.5	22.4	21.3	16.8
87.5°	10.1	13.4	12.3	11.2	6.7
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	14.14	15.62	14.50	15.94	16.25	17.91	19.40	18.28	19.71	20.02
	3H	15.79	17.12	16.17	17.45	17.81	19.03	20.36	19.40	20.68	21.05
	4H	16.46	17.71	16.86	18.06	18.44	19.32	20.56	19.72	20.91	21.29
	6H	16.98	18.13	17.39	18.49	18.89	19.51	20.66	19.93	21.03	21.42
	8H	17.16	18.25	17.59	18.64	19.04	19.57	20.66	19.99	21.05	21.45
	12H	17.28	18.33	17.71	18.71	19.14	19.59	20.64	20.02	21.02	21.45
4H	2H	14.92	16.17	15.32	16.52	16.90	18.07	19.32	18.47	19.67	20.05
	3H	16.78	17.82	17.19	18.22	18.62	19.38	20.42	19.79	20.82	21.22
	4H	17.59	18.52	18.03	18.94	19.38	19.79	20.72	20.22	21.14	21.58
	6H	18.24	19.05	18.70	19.49	19.95	20.11	20.91	20.57	21.36	21.82
	8H	18.47	19.22	18.93	19.67	20.13	20.20	20.95	20.66	21.40	21.87
	12H	18.64	19.31	19.12	19.79	20.26	20.26	20.93	20.74	21.41	21.89
8H	4H	17.94	18.70	18.41	19.14	19.61	19.92	20.68	20.39	21.12	21.59
	6H	18.73	19.36	19.23	19.85	20.33	20.34	20.96	20.83	21.45	21.93
	8H	19.05	19.61	19.57	20.12	20.61	20.49	21.05	21.00	21.56	22.05
	12H	19.32	19.81	19.83	20.31	20.87	20.61	21.11	21.12	21.60	22.16
12H	4H	17.97	18.64	18.45	19.12	19.60	19.93	20.60	20.41	21.08	21.55
	6H	18.80	19.36	19.31	19.87	20.36	20.36	20.92	20.87	21.43	21.92
	8H	19.18	19.68	19.69	20.17	20.74	20.56	21.05	21.07	21.55	22.11