

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: P1060751

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

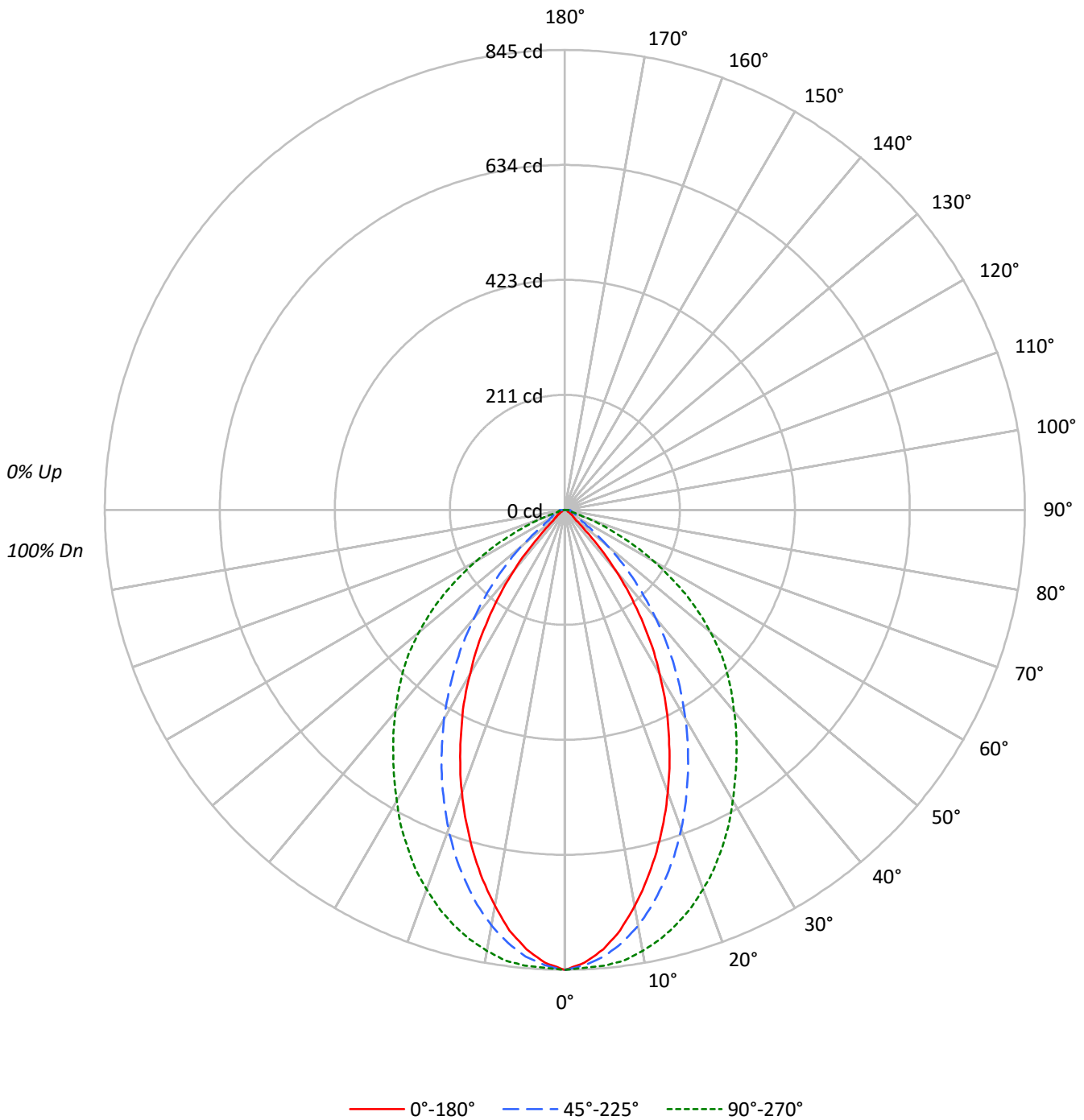
Lumens per Lamp: N/A
Luminaire Lumens: 1060.8 lumens
Efficiency: N/A
Efficacy: 29.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7278	7278	7278
5°	7006	7122	7267
10°	6460	6784	7195
15°	5798	6297	7036
20°	5068	5725	6801
25°	4286	5084	6499
30°	3462	4408	6133
35°	2578	3683	5779
40°	1636	2919	5436
45°	654	2141	5126
50°	285	1365	4679
55°	219	706	4084
60°	155	482	3240
65°	114	479	2213
70°	113	423	1015
75°	150	446	409
80°	223	501	446
85°	445	889	662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	7.3
10°-20°	199.6	18.8
20°-30°	252.0	23.8
30°-40°	231.5	21.8
40°-50°	157.8	14.9
50°-60°	85.6	8.1
60°-70°	36.3	3.4
70°-80°	12.6	1.2
80°-90°	8.0	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°	529.0	49.9
0°-40°	760.5	71.7
0°-60°	1003.9	94.6
0°-90°	1060.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1060.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	810	823	824	831	841	75
15°	650	672	706	757	789	181
25°	451	480	535	618	684	206
35°	245	278	350	460	550	152
45°	54	86	176	311	421	49
55°	15	16	47	171	272	13
65°	6	7	24	54	109	6
75°	4	12	13	12	12	5
85°	4	9	9	9	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	845.2	845.2	845.2	845.2	845.2
2.5°	832.9	843.0	837.4	839.6	841.8
5°	810.5	822.8	823.9	830.6	840.7
7.5°	779.2	793.7	802.7	819.5	835.1
10°	738.8	756.8	775.8	802.7	822.8
12.5°	696.3	715.3	743.3	781.4	808.3
15°	650.4	671.7	706.4	756.8	789.2
17.5°	602.3	625.8	667.2	726.5	768.0
20°	553.0	578.8	624.7	691.8	742.2
22.5°	502.6	529.5	579.9	656.0	715.3
25°	451.1	480.3	535.1	617.9	684.0
27.5°	401.9	428.8	489.2	579.9	652.7
30°	348.2	378.4	443.3	540.7	616.8
32.5°	298.9	328.0	396.3	500.4	583.2
35°	245.2	277.6	350.4	460.1	549.7
37.5°	194.8	226.1	305.6	422.0	517.2
40°	145.5	178.0	259.7	384.0	483.6
42.5°	97.4	132.1	216.1	344.8	452.3
45°	53.7	86.2	175.8	311.2	420.9
47.5°	28.0	47.0	137.7	277.6	387.3
50°	21.3	25.7	101.9	240.7	349.3
52.5°	17.9	19.0	69.4	203.7	311.2
55°	14.6	15.7	47.0	171.3	272.0
57.5°	11.2	12.3	33.6	139.9	228.4
60°	9.0	10.1	28.0	107.5	188.1
62.5°	6.7	7.8	26.9	79.5	147.8
65°	5.6	6.7	23.5	53.7	108.6
67.5°	4.5	6.7	20.2	34.7	72.8
70°	4.5	9.0	16.8	22.4	40.3
72.5°	4.5	10.1	14.6	14.6	14.6
75°	4.5	12.3	13.4	12.3	12.3
77.5°	4.5	11.2	11.2	11.2	11.2
80°	4.5	10.1	10.1	10.1	9.0
82.5°	4.5	9.0	10.1	10.1	7.8
85°	4.5	9.0	9.0	9.0	6.7
87.5°	3.4	9.0	9.0	9.0	4.5
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	15.34	16.61	15.70	16.93	17.24
	3H	0.00	0.00	0.00	0.31	0.68	15.69	16.82	16.07	17.15	17.52
	4H	0.24	1.29	0.65	1.64	2.03	15.66	16.71	16.06	17.06	17.44
	6H	1.62	2.58	2.03	2.95	3.34	15.63	16.60	16.05	16.97	17.36
	8H	2.30	3.21	2.73	3.60	4.01	15.62	16.53	16.05	16.93	17.33
	12H	3.11	3.98	3.54	4.36	4.79	15.62	16.49	16.05	16.88	17.31
4H	2H	1.03	2.08	1.44	2.43	2.82	15.14	16.19	15.54	16.54	16.92
	3H	2.46	3.32	2.88	3.72	4.13	15.53	16.39	15.95	16.80	17.20
	4H	3.91	4.67	4.35	5.10	5.54	15.52	16.28	15.95	16.70	17.14
	6H	5.16	5.82	5.62	6.27	6.73	15.53	16.19	16.00	16.64	17.11
	8H	5.73	6.35	6.20	6.80	7.27	15.54	16.16	16.01	16.61	17.08
	12H	6.41	6.96	6.90	7.44	7.91	15.58	16.12	16.07	16.61	17.08
8H	4H	4.98	5.60	5.46	6.05	6.52	15.42	16.03	15.89	16.48	16.95
	6H	6.60	7.10	7.11	7.60	8.08	15.47	15.97	15.97	16.47	16.95
	8H	7.44	7.89	7.96	8.41	8.90	15.52	15.98	16.05	16.49	16.98
	12H	8.41	8.81	8.93	9.31	9.88	15.64	16.04	16.16	16.54	17.11
12H	4H	5.17	5.72	5.66	6.20	6.68	15.38	15.92	15.86	16.40	16.88
	6H	6.95	7.40	7.47	7.92	8.41	15.43	15.89	15.96	16.40	16.90
	8H	7.98	8.37	8.49	8.87	9.44	15.54	15.94	16.06	16.43	17.01