

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: P1060779

Luminaire Tested: S124RDR-H1195D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H1195D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

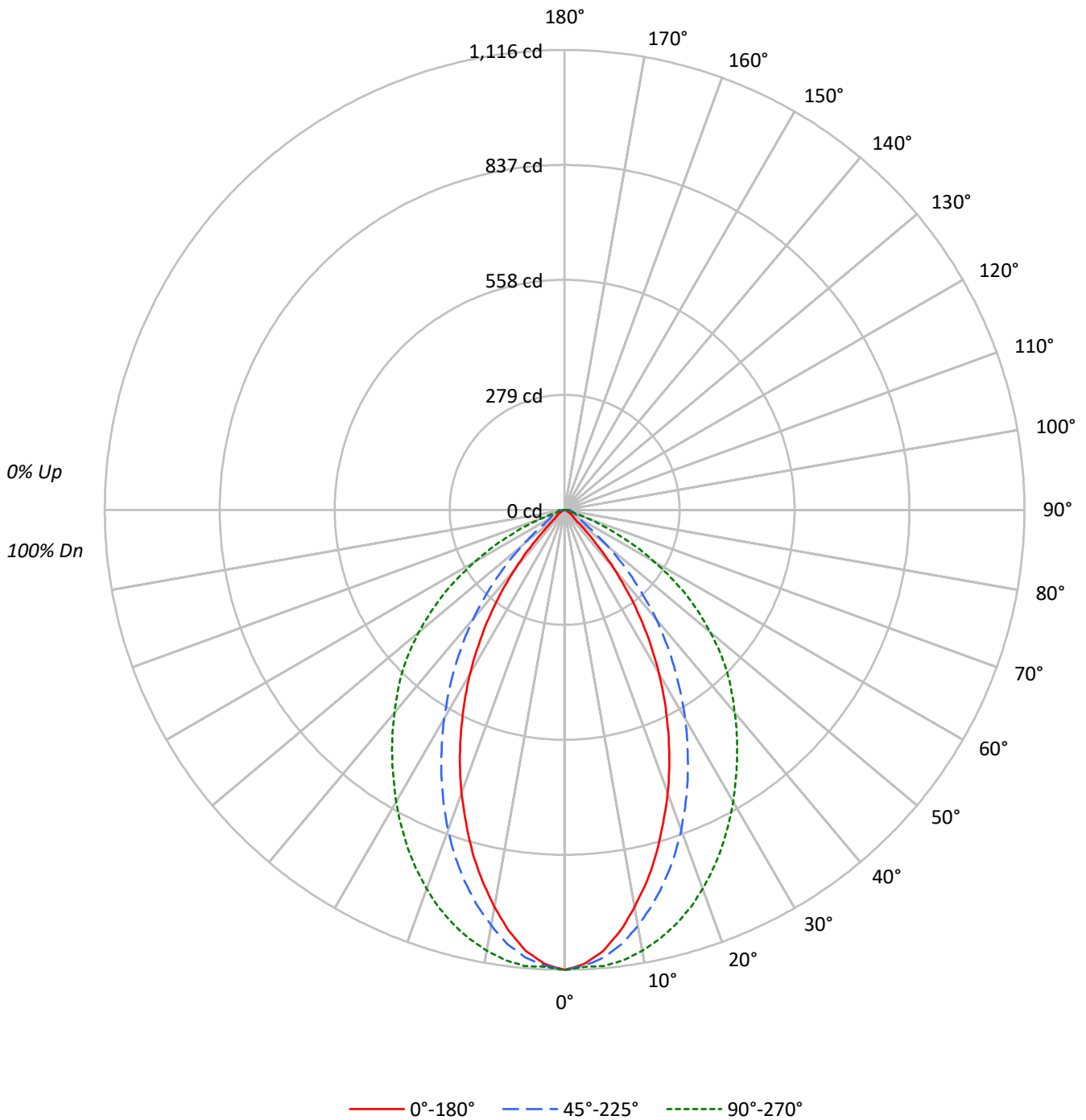
Lumens per Lamp: N/A
Luminaire Lumens: 1406.9 lumens
Efficiency: N/A
Efficacy: 38.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060779

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1060779

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-BVL-W

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				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9613	9613	9613
5°	9287	9423	9604
10°	8558	8959	9497
15°	7686	8328	9286
20°	6700	7576	8969
25°	5651	6722	8577
30°	4560	5810	8130
35°	3374	4862	7672
40°	2091	3874	7217
45°	829	2824	6797
50°	368	1772	6178
55°	296	925	5409
60°	203	699	4309
65°	134	695	2963
70°	131	627	1385
75°	173	609	609
80°	258	714	714
85°	514	1423	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6797 cd/sqm



TEST NUMBER: P1060779

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	7.3
10°-20°	264.3	18.8
20°-30°	333.6	23.7
30°-40°	306.0	21.8
40°-50°	208.4	14.8
50°-60°	113.5	8.1
60°-70°	49.1	3.5
70°-80°	17.9	1.3
80°-90°	11.5	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°	700.3	49.8
0°-40°	1006.3	71.5
0°-60°	1328.3	94.4
0°-90°	1406.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1406.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1074	1089	1090	1102	1111	99
15°	862	892	934	1001	1042	240
25°	595	637	708	820	903	272
35°	321	368	462	609	730	198
45°	68	114	232	411	558	63
55°	20	21	62	227	360	18
65°	7	9	34	71	145	8
75°	5	17	18	18	18	6
85°	5	12	14	14	10	5
90°	0	0	0	0	0	



TEST NUMBER: P1060779

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.3	1116.3	1116.3	1116.3	1116.3
2.5°	1103.2	1116.3	1107.1	1109.7	1109.7
5°	1074.4	1088.8	1090.1	1101.9	1111.0
7.5°	1031.1	1052.1	1062.6	1086.1	1101.9
10°	978.7	1003.6	1024.6	1065.2	1086.1
12.5°	922.4	951.2	982.6	1036.4	1066.5
15°	862.1	892.2	934.2	1001.0	1041.6
17.5°	795.3	832.0	883.1	963.0	1012.8
20°	731.1	767.8	826.7	917.1	978.7
22.5°	664.3	702.3	767.8	868.7	942.0
25°	594.8	636.8	707.5	820.2	902.7
27.5°	526.7	571.2	645.9	769.1	860.8
30°	458.6	503.1	584.3	716.7	817.6
32.5°	389.1	435.0	522.8	661.6	773.0
35°	321.0	368.2	462.5	609.2	729.8
37.5°	251.6	301.3	402.2	558.1	686.5
40°	186.0	235.8	344.6	507.0	642.0
42.5°	124.5	174.3	285.6	457.3	600.1
45°	68.1	114.0	231.9	411.4	558.1
47.5°	36.7	62.9	179.5	366.9	511.0
50°	27.5	34.1	132.3	319.7	461.2
52.5°	23.6	26.2	91.7	269.9	411.4
55°	19.7	21.0	61.6	226.7	360.3
57.5°	15.7	17.0	45.9	183.4	305.3
60°	11.8	14.4	40.6	141.5	250.2
62.5°	9.2	11.8	38.0	103.5	197.8
65°	6.6	9.2	34.1	70.8	145.4
67.5°	6.6	10.5	28.8	45.9	98.3
70°	5.2	14.4	24.9	30.1	55.0
72.5°	5.2	15.7	21.0	21.0	21.0
75°	5.2	17.0	18.3	18.3	18.3
77.5°	5.2	15.7	17.0	15.7	15.7
80°	5.2	14.4	14.4	14.4	14.4
82.5°	5.2	13.1	14.4	14.4	11.8
85°	5.2	11.8	14.4	14.4	10.5
87.5°	3.9	11.8	13.1	13.1	7.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1060779
 CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-BVL-W

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	0.16	0.00	0.47	0.79	16.27	17.55	16.64	17.86	18.18
	3H	0.32	1.45	0.70	1.78	2.15	16.65	17.78	17.03	18.11	18.47
	4H	1.53	2.59	1.94	2.94	3.32	16.63	17.68	17.03	18.03	18.41
	6H	2.71	3.68	3.13	4.05	4.44	16.61	17.58	17.03	17.95	18.34
	8H	3.30	4.21	3.73	4.60	5.01	16.61	17.53	17.04	17.92	18.32
	12H	3.97	4.84	4.40	5.22	5.65	16.63	17.50	17.06	17.88	18.31
4H	2H	2.52	3.57	2.92	3.92	4.30	16.08	17.13	16.48	17.48	17.87
	3H	4.10	4.96	4.51	5.36	5.77	16.50	17.36	16.91	17.76	18.17
	4H	5.39	6.16	5.82	6.58	7.02	16.50	17.27	16.94	17.69	18.13
	6H	6.51	7.18	6.98	7.62	8.09	16.54	17.20	17.00	17.65	18.12
	8H	7.02	7.64	7.49	8.09	8.56	16.57	17.18	17.04	17.63	18.10
	12H	7.57	8.11	8.06	8.60	9.07	16.63	17.18	17.12	17.66	18.14
8H	4H	6.47	7.09	6.94	7.54	8.01	16.41	17.03	16.88	17.47	17.95
	6H	8.01	8.52	8.52	9.02	9.50	16.49	16.99	16.99	17.49	17.97
	8H	8.82	9.28	9.34	9.79	10.28	16.57	17.03	17.09	17.54	18.03
	12H	9.65	10.05	10.17	10.55	11.12	16.74	17.14	17.26	17.64	18.21
12H	4H	6.66	7.21	7.15	7.69	8.17	16.37	16.92	16.86	17.40	17.88
	6H	8.37	8.82	8.89	9.34	9.83	16.46	16.92	16.98	17.43	17.92
	8H	9.38	9.78	9.90	10.28	10.85	16.60	17.00	17.11	17.50	18.07