

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: P1060320

Luminaire Tested: S124RDRP-S1195D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060320
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: S124RDRP-S1195D840-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

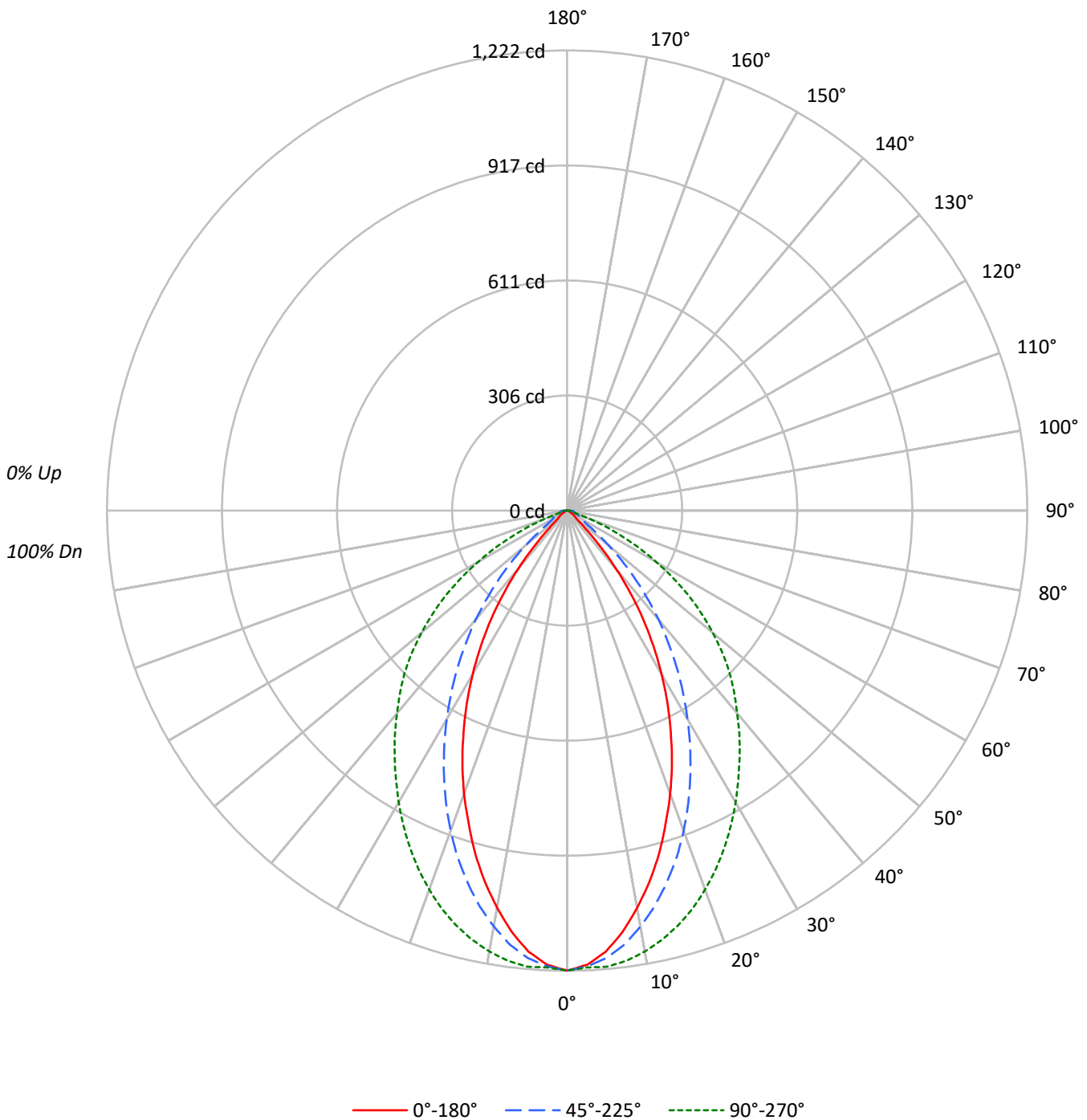
Lumens per Lamp: N/A
Luminaire Lumens: 1539.6 lumens
Efficiency: N/A
Efficacy: 36.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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

TEST NUMBER: P1060320

CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot



TEST NUMBER: P1060320

CATALOG NUMBER: S124RDRP-S1195D840-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	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°	10519	10519	10519
5°	10163	10311	10509
10°	9365	9804	10393
15°	8410	9114	10161
20°	7331	8290	9814
25°	6184	7356	9386
30°	4990	6359	8896
35°	3693	5320	8395
40°	2289	4239	7897
45°	908	3091	7438
50°	403	1940	6761
55°	323	1012	5920
60°	222	765	4715
65°	147	760	3242
70°	144	685	1516
75°	190	669	669
80°	283	784	784
85°	563	1561	1136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7438 cd/sqm



TEST NUMBER: P1060320

CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	7.3
10°-20°	289.2	18.8
20°-30°	365.0	23.7
30°-40°	334.9	21.8
40°-50°	228.1	14.8
50°-60°	124.3	8.1
60°-70°	53.8	3.5
70°-80°	19.6	1.3
80°-90°	12.6	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°	766.3	49.8
0°-40°	1101.2	71.5
0°-60°	1453.6	94.4
0°-90°	1539.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1539.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1222	1222	1222	1222	1222	
5°	1176	1191	1193	1206	1216	109
15°	943	976	1022	1095	1140	262
25°	651	697	774	898	988	297
35°	351	403	506	667	799	217
45°	75	125	254	450	611	69
55°	22	23	67	248	394	19
65°	7	10	37	77	159	8
75°	6	19	20	20	20	6
85°	6	13	16	16	12	5
90°	0	0	0	0	0	



TEST NUMBER: P1060320

CATALOG NUMBER: S124RDRP-S1195D840-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1221.6	1221.6	1221.6	1221.6	1221.6
2.5°	1207.2	1221.6	1211.5	1214.4	1214.4
5°	1175.7	1191.4	1192.9	1205.8	1215.8
7.5°	1128.4	1151.3	1162.8	1188.6	1205.8
10°	1071.0	1098.3	1121.2	1165.6	1188.6
12.5°	1009.4	1040.9	1075.3	1134.1	1167.1
15°	943.4	976.4	1022.3	1095.4	1139.8
17.5°	870.3	910.4	966.3	1053.8	1108.3
20°	800.0	840.2	904.7	1003.6	1071.0
22.5°	726.9	768.5	840.2	950.6	1030.9
25°	650.9	696.8	774.2	897.5	987.9
27.5°	576.4	625.1	706.8	841.6	942.0
30°	501.8	550.6	639.5	784.3	894.7
32.5°	425.8	476.0	572.1	724.0	845.9
35°	351.3	402.9	506.1	666.7	798.6
37.5°	275.3	329.8	440.2	610.8	751.3
40°	203.6	258.1	377.1	554.9	702.5
42.5°	136.2	190.7	312.6	500.4	656.7
45°	74.6	124.7	253.8	450.2	610.8
47.5°	40.1	68.8	196.4	401.5	559.2
50°	30.1	37.3	144.8	349.8	504.7
52.5°	25.8	28.7	100.4	295.4	450.2
55°	21.5	22.9	67.4	248.0	394.3
57.5°	17.2	18.6	50.2	200.7	334.1
60°	12.9	15.8	44.4	154.8	273.8
62.5°	10.0	12.9	41.6	113.3	216.5
65°	7.2	10.0	37.3	77.4	159.1
67.5°	7.2	11.5	31.5	50.2	107.5
70°	5.7	15.8	27.2	33.0	60.2
72.5°	5.7	17.2	22.9	22.9	22.9
75°	5.7	18.6	20.1	20.1	20.1
77.5°	5.7	17.2	18.6	17.2	17.2
80°	5.7	15.8	15.8	15.8	15.8
82.5°	5.7	14.3	15.8	15.8	12.9
85°	5.7	12.9	15.8	15.8	11.5
87.5°	4.3	12.9	14.3	14.3	8.6
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1060320
 CATALOG NUMBER: S124RDRP-S1195D840-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	0.48	0.00	0.79	1.10	16.58	17.86	16.95	18.18	18.49
	3H	0.64	1.77	1.02	2.10	2.46	16.96	18.09	17.34	18.42	18.79
	4H	1.85	2.90	2.25	3.25	3.64	16.94	17.99	17.34	18.34	18.73
	6H	3.03	4.00	3.44	4.37	4.76	16.93	17.89	17.34	18.26	18.66
	8H	3.62	4.53	4.05	4.92	5.33	16.93	17.84	17.36	18.23	18.64
	12H	4.28	5.16	4.72	5.54	5.97	16.94	17.81	17.37	18.20	18.63
4H	2H	2.83	3.88	3.23	4.23	4.62	16.39	17.45	16.80	17.80	18.18
	3H	4.41	5.27	4.83	5.68	6.08	16.81	17.67	17.23	18.08	18.48
	4H	5.70	6.47	6.14	6.89	7.33	16.81	17.58	17.25	18.00	18.44
	6H	6.83	7.49	7.29	7.94	8.41	16.85	17.52	17.32	17.96	18.43
	8H	7.34	7.96	7.81	8.40	8.87	16.88	17.50	17.35	17.95	18.42
	12H	7.89	8.43	8.37	8.91	9.39	16.95	17.49	17.43	17.98	18.45
8H	4H	6.79	7.41	7.26	7.85	8.33	16.72	17.34	17.19	17.79	18.26
	6H	8.33	8.84	8.84	9.33	9.82	16.80	17.31	17.31	17.80	18.29
	8H	9.14	9.59	9.66	10.11	10.60	16.89	17.34	17.41	17.86	18.35
	12H	9.97	10.37	10.48	10.86	11.44	17.06	17.46	17.57	17.95	18.53
12H	4H	6.98	7.52	7.47	8.01	8.48	16.69	17.23	17.17	17.72	18.19
	6H	8.69	9.14	9.21	9.66	10.15	16.78	17.23	17.30	17.75	18.24
	8H	9.70	10.10	10.21	10.60	11.17	16.91	17.31	17.43	17.81	18.38