

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: P1060370

Luminaire Tested: S124RDR-S1195D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060370
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-S1195D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

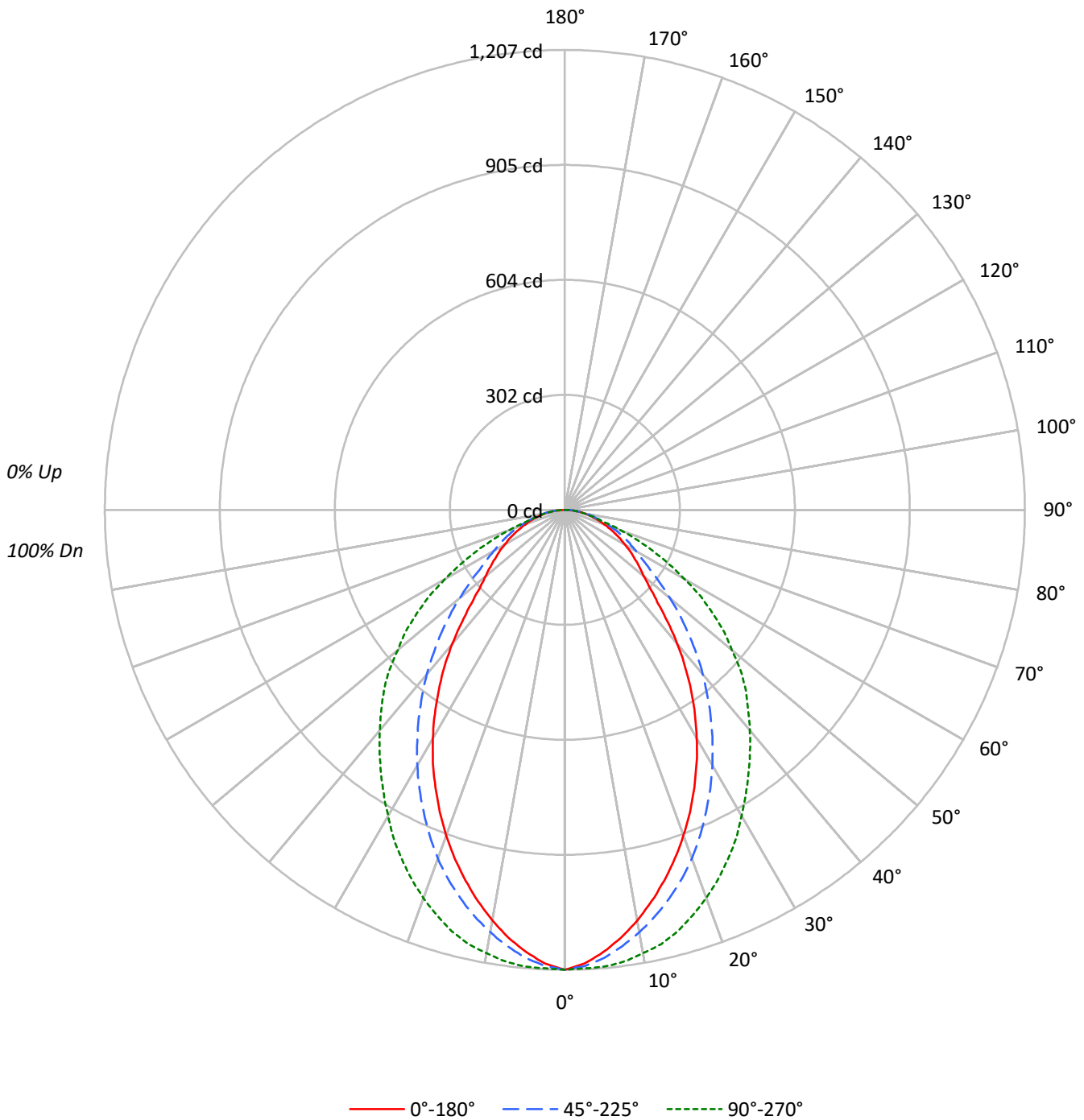
Lumens per Lamp: N/A
Luminaire Lumens: 2197.2 lumens
Efficiency: N/A
Efficacy: 52.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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: P1060370

CATALOG NUMBER: S124RDR-S1195D940-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1060370

CATALOG NUMBER: S124RDR-S1195D940-X4F0-XX-UDD-WVL-S

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	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°	10393	10393	10393
5°	10071	10203	10400
10°	9569	9845	10332
15°	8977	9417	10207
20°	8335	8926	9935
25°	7632	8317	9615
30°	6881	7698	9220
35°	6065	7022	8844
40°	5162	6329	8489
45°	4190	5592	8180
50°	3626	4813	7660
55°	3361	4084	7103
60°	3138	3682	6231
65°	2938	3454	5182
70°	2739	3185	3918
75°	2608	2948	2821
80°	2445	2698	2385
85°	2253	2500	1877

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8180 cd/sqm



TEST NUMBER: P1060370

CATALOG NUMBER: S124RDR-S1195D940-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.4	5.1
10°-20°	299.5	13.6
20°-30°	409.0	18.6
30°-40°	428.5	19.5
40°-50°	370.8	16.9
50°-60°	278.7	12.7
60°-70°	179.7	8.2
70°-80°	92.1	4.2
80°-90°	27.5	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°	819.9	37.3
0°-40°	1248.3	56.8
0°-60°	1897.9	86.4
0°-90°	2197.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2197.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1207	1207	1207	1207	1207	
5°	1165	1183	1180	1189	1203	109
15°	1007	1032	1056	1104	1145	282
25°	803	834	875	944	1012	369
35°	577	610	668	756	841	359
45°	344	380	459	572	672	271
55°	224	232	272	388	473	201
65°	144	147	170	205	254	143
75°	78	87	89	87	85	83
85°	23	27	25	24	19	26
90°	0	0	0	0	0	



TEST NUMBER: P1060370

CATALOG NUMBER: S124RDR-S1195D940-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1206.9	1206.9	1206.9	1206.9	1206.9
2.5°	1191.7	1206.9	1198.0	1200.5	1204.3
5°	1165.1	1182.8	1180.3	1189.2	1203.1
7.5°	1132.2	1151.2	1155.0	1175.2	1195.5
10°	1094.3	1115.8	1125.9	1156.3	1181.6
12.5°	1052.5	1075.3	1093.0	1131.0	1167.7
15°	1007.0	1032.3	1056.3	1104.4	1144.9
17.5°	960.2	985.5	1017.1	1070.2	1115.8
20°	909.6	937.4	974.1	1029.8	1084.2
22.5°	857.7	886.8	926.0	986.7	1050.0
25°	803.3	833.7	875.4	943.7	1012.0
27.5°	748.9	779.3	826.1	898.2	972.8
30°	692.0	723.6	774.2	852.7	927.3
32.5°	635.1	669.2	721.1	804.6	884.3
35°	576.9	609.8	668.0	756.5	841.3
37.5°	518.7	552.8	614.8	709.7	798.3
40°	459.2	494.6	563.0	662.9	755.2
42.5°	399.8	437.7	509.8	614.8	712.2
45°	344.1	379.5	459.2	571.8	671.7
47.5°	302.3	326.4	408.6	530.1	626.2
50°	270.7	283.4	359.3	484.5	571.8
52.5°	246.7	255.5	313.7	435.2	527.5
55°	223.9	231.5	272.0	388.4	473.1
57.5°	203.7	207.5	240.4	342.8	421.3
60°	182.2	186.0	213.8	293.5	361.8
62.5°	163.2	165.7	192.3	246.7	307.4
65°	144.2	146.7	169.5	204.9	254.3
67.5°	126.5	130.3	148.0	167.0	202.4
70°	108.8	116.4	126.5	135.4	155.6
72.5°	93.6	101.2	106.3	108.8	110.1
75°	78.4	87.3	88.6	87.3	84.8
77.5°	63.3	70.8	70.8	68.3	65.8
80°	49.3	55.7	54.4	51.9	48.1
82.5°	36.7	40.5	39.2	36.7	32.9
85°	22.8	26.6	25.3	24.0	19.0
87.5°	11.4	15.2	13.9	12.7	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)