

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: P1060310

Luminaire Tested: S124RDR-S1195D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060310
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-S1195D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

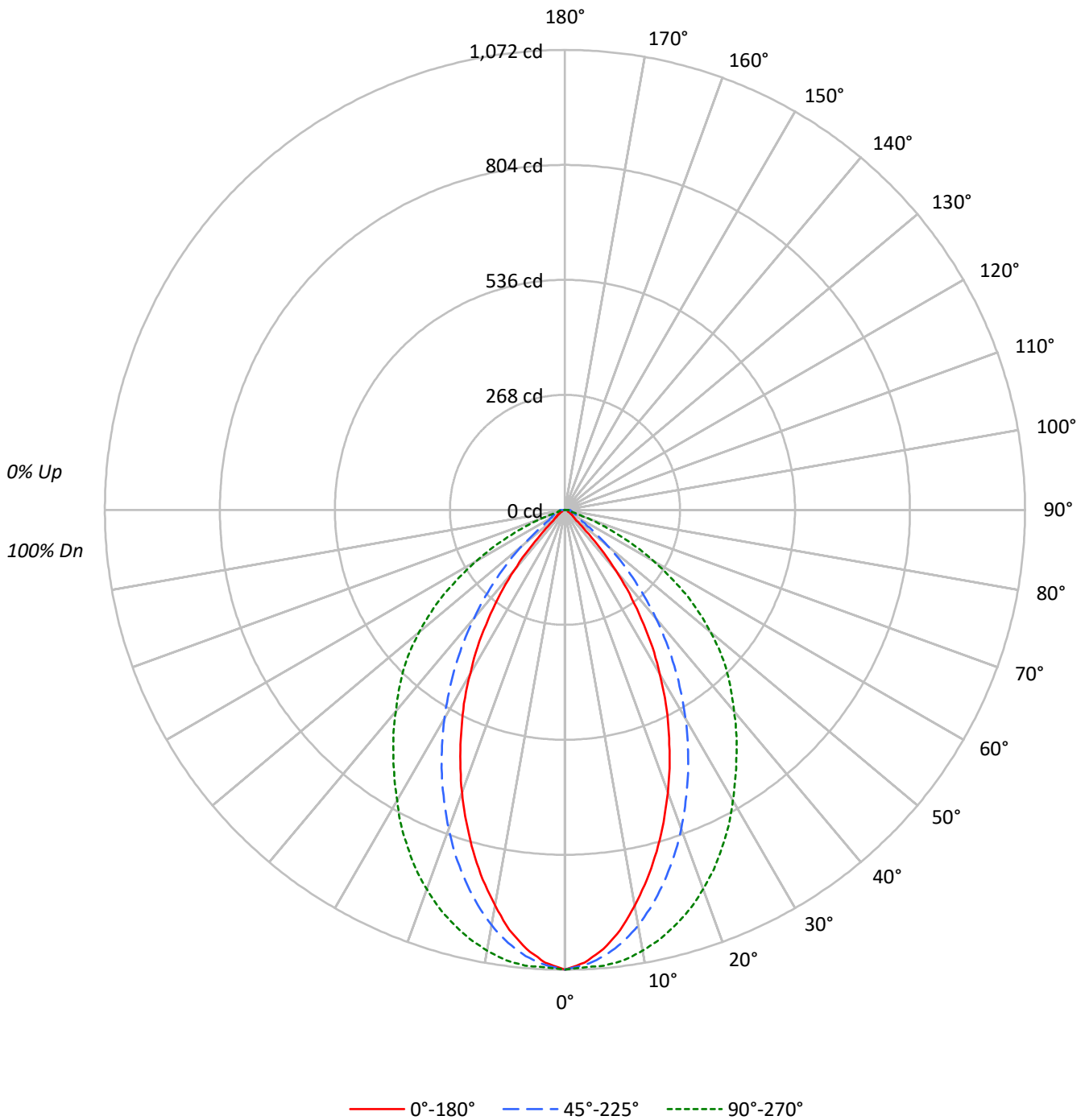
Lumens per Lamp: N/A
Luminaire Lumens: 1345.1 lumens
Efficiency: N/A
Efficacy: 32.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1060310

CATALOG NUMBER: S124RDR-S1195D835-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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°	9229	9229	9229
5°	8883	9030	9215
10°	8191	8601	9123
15°	7352	7985	8921
20°	6426	7259	8624
25°	5435	6447	8241
30°	4389	5589	7777
35°	3268	4671	7327
40°	2074	3702	6893
45°	829	2714	6499
50°	362	1731	5933
55°	278	895	5178
60°	196	611	4108
65°	145	607	2806
70°	144	536	1287
75°	190	566	519
80°	283	635	565
85°	563	1126	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6499 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	7.3
10°-20°	253.0	18.8
20°-30°	319.6	23.8
30°-40°	293.5	21.8
40°-50°	200.1	14.9
50°-60°	108.5	8.1
60°-70°	46.1	3.4
70°-80°	15.9	1.2
80°-90°	10.1	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°	670.7	49.9
0°-40°	964.2	71.7
0°-60°	1272.9	94.6
0°-90°	1345.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1345.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1028	1043	1045	1053	1066	95
15°	825	852	896	960	1001	230
25°	572	609	678	784	867	262
35°	311	352	444	583	697	193
45°	68	109	223	395	534	63
55°	18	20	60	217	345	17
65°	7	8	30	68	138	7
75°	6	16	17	16	16	6
85°	6	11	11	11	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.7	1071.7	1071.7	1071.7	1071.7
2.5°	1056.1	1068.8	1061.8	1064.6	1067.4
5°	1027.7	1043.3	1044.7	1053.2	1066.0
7.5°	987.9	1006.4	1017.7	1039.0	1058.9
10°	936.8	959.5	983.7	1017.7	1043.3
12.5°	882.9	907.0	942.5	990.8	1024.8
15°	824.7	851.7	895.7	959.5	1000.7
17.5°	763.7	793.5	846.0	921.2	973.7
20°	701.2	733.9	792.1	877.2	941.1
22.5°	637.3	671.4	735.3	831.8	907.0
25°	572.0	608.9	678.5	783.5	867.3
27.5°	509.6	543.7	620.3	735.3	827.5
30°	441.4	479.8	562.1	685.6	782.1
32.5°	379.0	415.9	502.5	634.5	739.5
35°	310.9	352.0	444.3	583.4	697.0
37.5°	247.0	286.7	387.5	535.1	655.8
40°	184.5	225.7	329.3	486.9	613.2
42.5°	123.5	167.5	274.0	437.2	573.5
45°	68.1	109.3	222.9	394.6	533.7
47.5°	35.5	59.6	174.6	352.0	491.1
50°	27.0	32.6	129.2	305.2	442.9
52.5°	22.7	24.1	88.0	258.3	394.6
55°	18.5	19.9	59.6	217.2	344.9
57.5°	14.2	15.6	42.6	177.4	289.6
60°	11.4	12.8	35.5	136.3	238.5
62.5°	8.5	9.9	34.1	100.8	187.4
65°	7.1	8.5	29.8	68.1	137.7
67.5°	5.7	8.5	25.6	44.0	92.3
70°	5.7	11.4	21.3	28.4	51.1
72.5°	5.7	12.8	18.5	18.5	18.5
75°	5.7	15.6	17.0	15.6	15.6
77.5°	5.7	14.2	14.2	14.2	14.2
80°	5.7	12.8	12.8	12.8	11.4
82.5°	5.7	11.4	12.8	12.8	9.9
85°	5.7	11.4	11.4	11.4	8.5
87.5°	4.3	11.4	11.4	11.4	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)