

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: P1060316

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060316
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-S1195D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

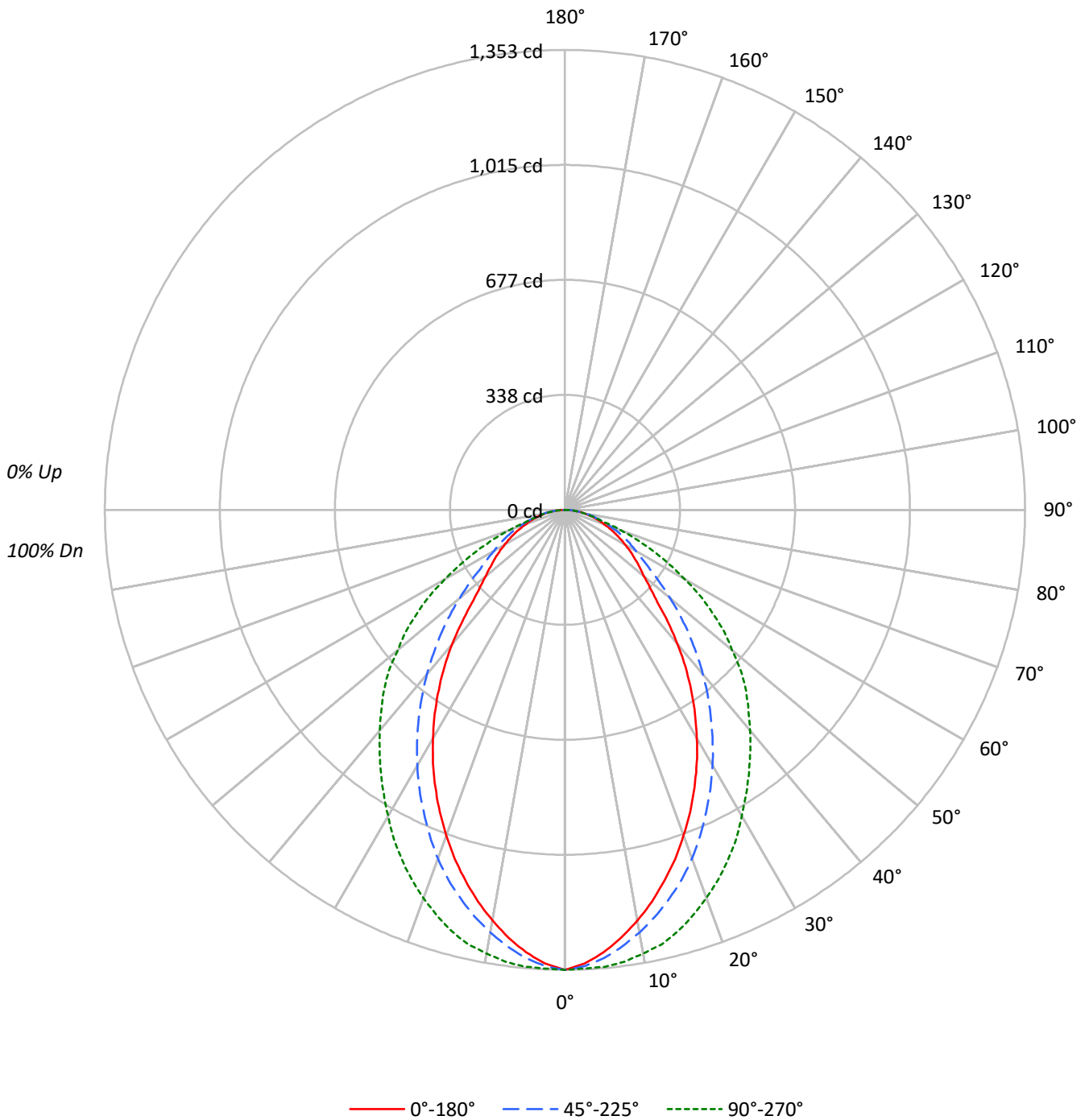
Lumens per Lamp: N/A
Luminaire Lumens: 2464.0 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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																				
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11654	11654	11654
5°	11294	11441	11663
10°	10731	11040	11587
15°	10068	10561	11446
20°	9347	10011	11141
25°	8560	9327	10784
30°	7716	8633	10340
35°	6800	7875	9917
40°	5789	7096	9521
45°	4699	6272	9174
50°	4067	5397	8590
55°	3770	4579	7966
60°	3519	4130	6987
65°	3295	3873	5811
70°	3072	3573	4393
75°	2928	3304	3164
80°	2742	3025	2673
85°	2519	2806	2104

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9174 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	5.1
10°-20°	335.9	13.6
20°-30°	458.6	18.6
30°-40°	480.5	19.5
40°-50°	415.9	16.9
50°-60°	312.5	12.7
60°-70°	201.5	8.2
70°-80°	103.3	4.2
80°-90°	30.9	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°	919.4	37.3
0°-40°	1399.9	56.8
0°-60°	2128.3	86.4
0°-90°	2464.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2464.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1353	1353	1353	1353	1353	
5°	1307	1326	1324	1334	1349	122
15°	1129	1158	1185	1238	1284	317
25°	901	935	982	1058	1135	413
35°	647	684	749	848	943	403
45°	386	426	515	641	753	304
55°	251	260	305	436	531	226
65°	162	165	190	230	285	161
75°	88	98	99	98	95	93
85°	26	30	28	27	21	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1353.4	1353.4	1353.4	1353.4	1353.4
2.5°	1336.4	1353.4	1343.5	1346.3	1350.6
5°	1306.6	1326.5	1323.6	1333.6	1349.2
7.5°	1269.7	1291.0	1295.3	1318.0	1340.7
10°	1227.2	1251.3	1262.6	1296.7	1325.1
12.5°	1180.3	1205.9	1225.7	1268.3	1309.5
15°	1129.3	1157.7	1184.6	1238.5	1283.9
17.5°	1076.8	1105.2	1140.6	1200.2	1251.3
20°	1020.0	1051.2	1092.4	1154.8	1215.8
22.5°	961.9	994.5	1038.5	1106.6	1177.5
25°	900.9	934.9	981.7	1058.3	1135.0
27.5°	839.9	873.9	926.4	1007.3	1091.0
30°	776.0	811.5	868.2	956.2	1039.9
32.5°	712.2	750.5	808.7	902.3	991.7
35°	646.9	683.8	749.1	848.4	943.4
37.5°	581.7	620.0	689.5	795.9	895.2
40°	515.0	554.7	631.3	743.4	847.0
42.5°	448.3	490.9	571.7	689.5	798.7
45°	385.9	425.6	515.0	641.2	753.3
47.5°	339.1	366.0	458.2	594.4	702.3
50°	303.6	317.8	402.9	543.4	641.2
52.5°	276.6	286.6	351.8	488.0	591.6
55°	251.1	259.6	305.0	435.5	530.6
57.5°	228.4	232.7	269.6	384.5	472.4
60°	204.3	208.5	239.8	329.1	405.7
62.5°	183.0	185.8	215.6	276.6	344.7
65°	161.7	164.6	190.1	229.8	285.2
67.5°	141.9	146.1	166.0	187.3	227.0
70°	122.0	130.5	141.9	151.8	174.5
72.5°	105.0	113.5	119.2	122.0	123.4
75°	88.0	97.9	99.3	97.9	95.1
77.5°	70.9	79.4	79.4	76.6	73.8
80°	55.3	62.4	61.0	58.2	53.9
82.5°	41.1	45.4	44.0	41.1	36.9
85°	25.5	29.8	28.4	27.0	21.3
87.5°	12.8	17.0	15.6	14.2	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)