

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: P1060396

Luminaire Tested: S124RDR-S350D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S350D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

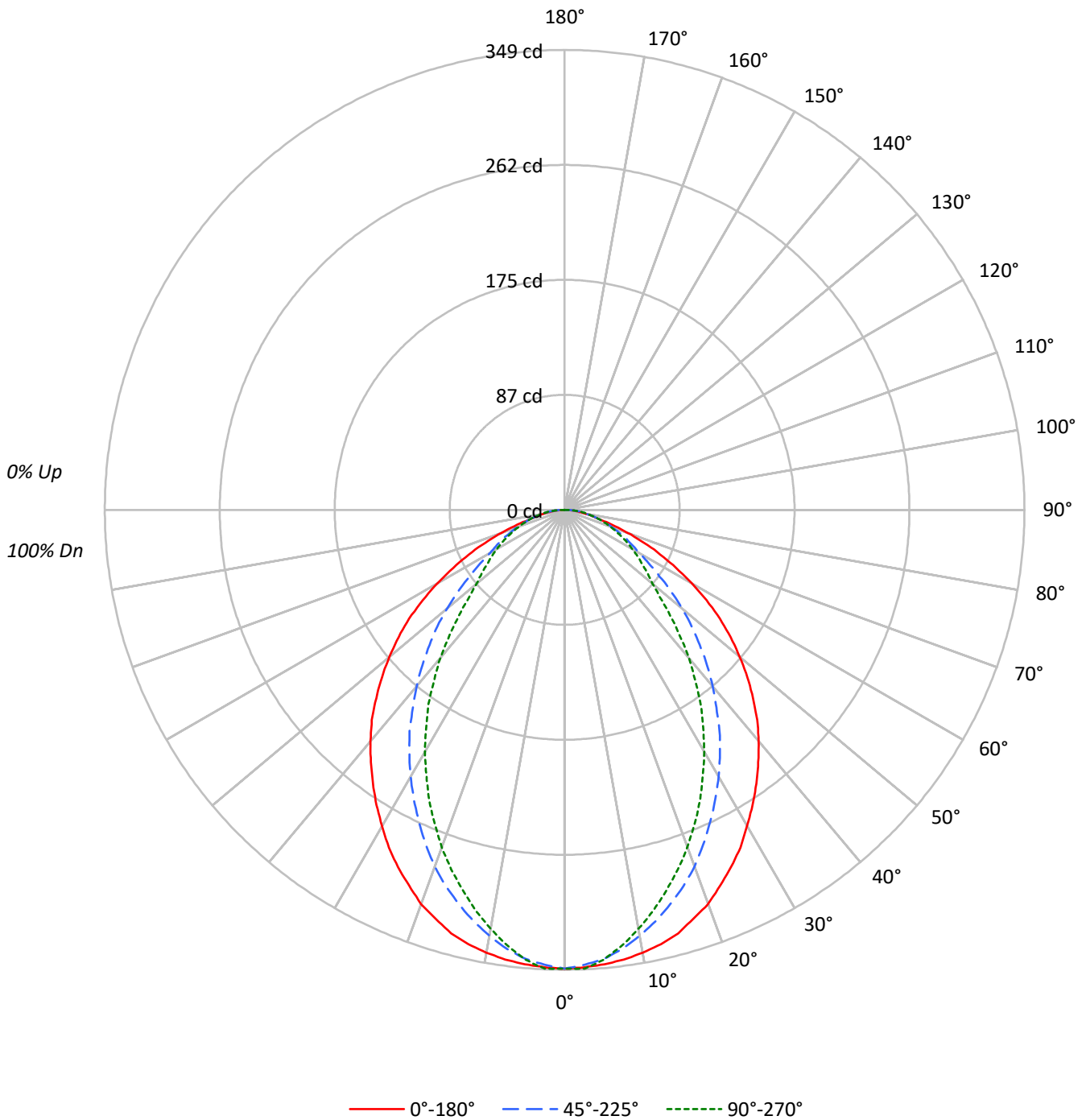
Lumens per Lamp: N/A
Luminaire Lumens: 671.5 lumens
Efficiency: N/A
Efficacy: 53.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1060396

CATALOG NUMBER: S124RDR-S350D835-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1060396

CATALOG NUMBER: S124RDR-S350D835-X4F0-XX-UDD-WVL-B

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	107	104	100	97	99	97	94	96	93	91	92	90	88				86	
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76				74	
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66				64	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58				56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52				50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46				44	
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42				40	
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38				36	
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35				33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32				30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2998	2998	2998
5°	2993	2957	2961
10°	2984	2870	2823
15°	2966	2762	2663
20°	2918	2640	2497
25°	2842	2485	2310
30°	2754	2324	2108
35°	2667	2155	1893
40°	2576	1964	1651
45°	2461	1765	1381
50°	2324	1557	1168
55°	2162	1321	1081
60°	1917	1121	1021
65°	1634	1033	968
70°	1276	959	916
75°	872	885	885
80°	749	833	853
85°	642	810	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2461 cd/sqm



TEST NUMBER: P1060396

CATALOG NUMBER: S124RDR-S350D835-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.4	4.8
10°-20°	88.0	13.1
20°-30°	122.2	18.2
30°-40°	130.9	19.5
40°-50°	116.0	17.3
50°-60°	87.4	13.0
60°-70°	56.6	8.4
70°-80°	29.1	4.3
80°-90°	8.9	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°	242.5	36.1
0°-40°	373.5	55.6
0°-60°	576.9	85.9
0°-90°	671.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	671.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	348	348	348	348	348	
5°	346	347	342	342	342	33
15°	333	325	310	302	299	94
25°	299	283	262	248	243	138
35°	254	231	205	187	180	159
45°	202	176	145	122	113	156
55°	144	120	88	74	72	128
65°	80	65	51	48	48	80
75°	26	27	27	27	27	31
85°	6	7	8	9	9	7
90°	0	0	0	0	0	



TEST NUMBER: P1060396

CATALOG NUMBER: S124RDR-S350D835-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	348.2	348.2	348.2	348.2	348.2
2.5°	347.4	348.6	345.4	347.8	348.6
5°	346.2	346.6	342.1	342.5	342.5
7.5°	344.1	343.3	336.0	333.9	333.5
10°	341.3	338.8	328.2	324.1	322.9
12.5°	337.6	333.1	319.6	313.9	311.4
15°	332.7	325.3	309.8	302.0	298.7
17.5°	325.3	315.9	299.5	289.7	286.0
20°	318.4	305.7	288.1	275.8	272.5
22.5°	308.5	295.0	275.0	261.9	257.8
25°	299.1	283.2	261.5	247.6	243.1
27.5°	288.9	270.9	247.6	232.8	227.1
30°	277.0	257.8	233.7	218.1	212.0
32.5°	265.6	245.1	219.3	202.1	195.6
35°	253.7	230.8	205.0	186.6	180.1
37.5°	241.4	217.3	189.1	171.0	162.5
40°	229.2	203.8	174.7	154.3	146.9
42.5°	216.5	189.9	160.0	138.7	129.3
45°	202.1	176.0	144.9	122.4	113.4
47.5°	188.2	162.5	130.9	106.4	98.2
50°	173.5	148.1	116.2	92.5	87.2
52.5°	158.8	133.4	101.9	81.8	79.4
55°	144.0	119.9	88.0	74.1	72.0
57.5°	127.7	106.0	75.7	67.1	65.5
60°	111.3	90.8	65.1	60.6	59.3
62.5°	95.3	77.7	57.7	54.0	53.2
65°	80.2	64.7	50.7	47.9	47.5
67.5°	65.5	53.2	44.2	42.6	41.7
70°	50.7	42.6	38.1	37.2	36.4
72.5°	37.6	34.4	32.3	31.9	31.5
75°	26.2	27.4	26.6	26.6	26.6
77.5°	20.9	21.3	21.7	22.1	21.7
80°	15.1	16.4	16.8	17.6	17.2
82.5°	10.6	11.5	12.7	13.1	13.5
85°	6.5	7.0	8.2	9.0	9.0
87.5°	2.9	3.3	4.1	4.9	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)