

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: P1060398

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

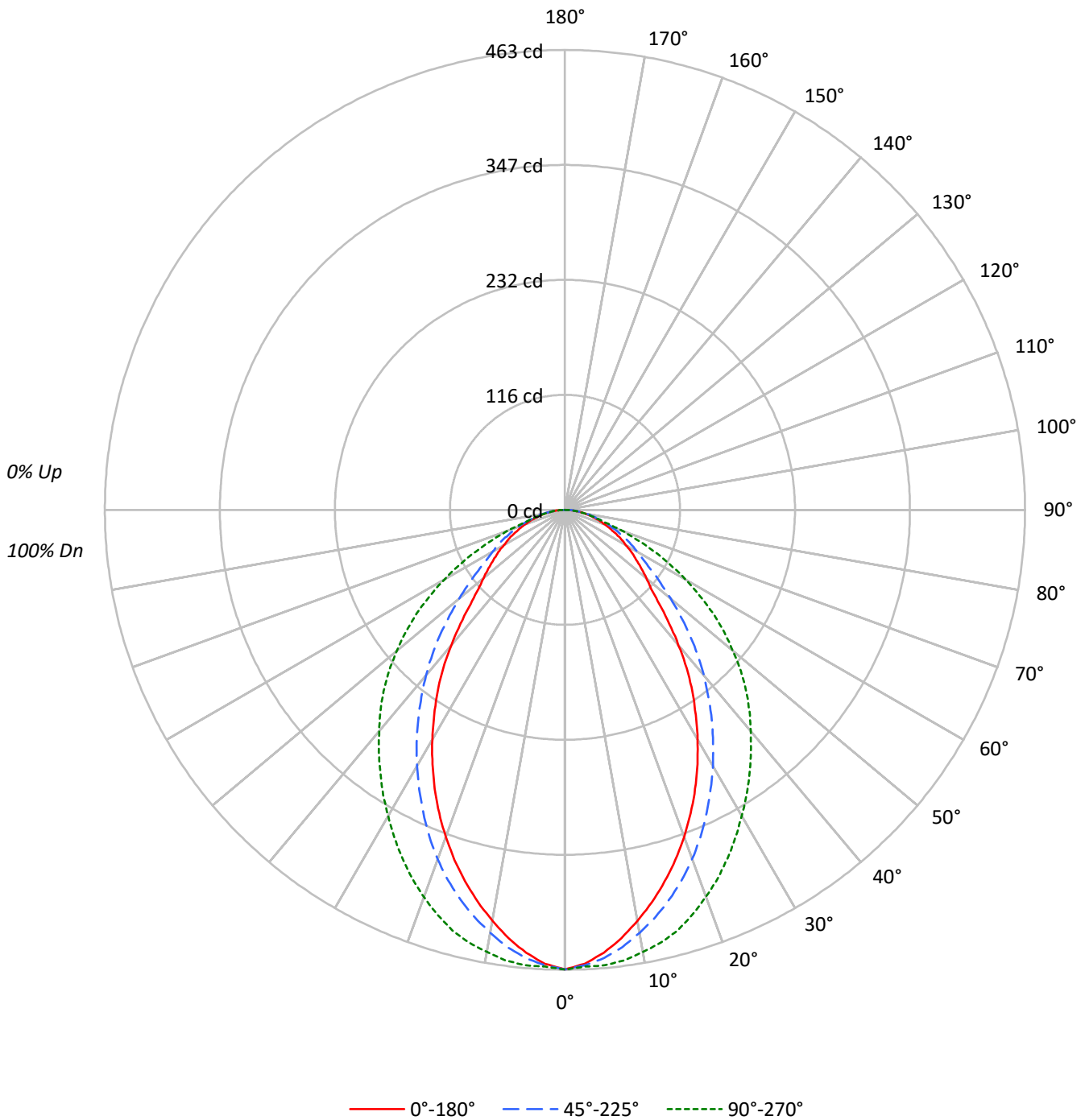
Lumens per Lamp: N/A
Luminaire Lumens: 849.0 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77				75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67				65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59				57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52				50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47				45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42				40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38				37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35				33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3984	3984	3984
5°	3869	3915	3979
10°	3673	3781	3953
15°	3454	3621	3907
20°	3212	3430	3801
25°	2945	3202	3677
30°	2655	2960	3538
35°	2351	2708	3405
40°	1998	2444	3268
45°	1636	2159	3142
50°	1432	1854	2957
55°	1315	1599	2735
60°	1219	1438	2411
65°	1143	1351	2019
70°	1073	1236	1516
75°	1008	1131	1105
80°	932	1036	932
85°	850	1008	810

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.8	5.0
10°-20°	115.1	13.6
20°-30°	157.3	18.5
30°-40°	165.3	19.5
40°-50°	143.4	16.9
50°-60°	108.2	12.7
60°-70°	70.1	8.3
70°-80°	36.0	4.2
80°-90°	10.9	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°	315.1	37.1
0°-40°	480.4	56.6
0°-60°	732.0	86.2
0°-90°	849.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	849.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	448	454	453	457	460	42
15°	387	397	406	425	438	109
25°	310	321	337	363	387	142
35°	224	236	258	292	324	139
45°	134	147	177	222	258	106
55°	88	90	106	151	182	79
65°	56	57	66	80	99	56
75°	30	34	34	34	33	32
85°	9	11	10	10	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	462.7	462.7	462.7	462.7	462.7
2.5°	457.4	463.1	459.0	459.9	460.3
5°	447.6	453.7	452.9	456.6	460.3
7.5°	434.9	442.2	443.9	451.3	457.4
10°	420.1	428.3	432.4	444.3	452.1
12.5°	404.6	412.8	420.1	435.3	446.3
15°	387.4	396.8	406.2	424.6	438.2
17.5°	369.4	379.2	391.1	411.1	427.1
20°	350.5	360.4	374.3	396.0	414.8
22.5°	330.5	341.5	356.3	379.6	401.7
25°	310.0	321.0	337.0	362.8	387.0
27.5°	288.7	300.2	317.4	346.0	371.8
30°	267.0	279.3	297.7	328.0	355.8
32.5°	244.9	258.0	277.6	310.0	340.3
35°	223.6	235.9	257.6	292.0	323.9
37.5°	201.5	213.8	237.1	274.4	307.5
40°	177.7	191.2	217.4	255.9	290.7
42.5°	155.6	169.1	197.4	238.3	274.8
45°	134.3	147.0	177.3	221.5	258.0
47.5°	117.9	126.9	157.2	205.2	240.0
50°	106.9	111.0	138.4	187.1	220.7
52.5°	97.0	100.3	121.2	169.1	201.9
55°	87.6	90.1	106.5	151.1	182.2
57.5°	79.4	80.7	93.4	133.1	160.9
60°	70.8	72.5	83.5	114.7	140.0
62.5°	63.9	64.7	74.9	97.0	119.2
65°	56.1	57.3	66.3	80.3	99.1
67.5°	49.1	51.2	57.3	65.5	78.2
70°	42.6	45.5	49.1	53.2	60.2
72.5°	36.4	39.7	41.8	43.4	42.2
75°	30.3	34.0	34.0	34.4	33.2
77.5°	24.6	27.8	27.4	27.0	25.4
80°	18.8	21.7	20.9	20.5	18.8
82.5°	13.9	16.0	15.2	14.7	12.7
85°	8.6	10.6	10.2	9.8	8.2
87.5°	4.1	6.1	5.7	5.3	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)