

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: P1060261

Luminaire Tested: S124RDR-S1020D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060261
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-S1020D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

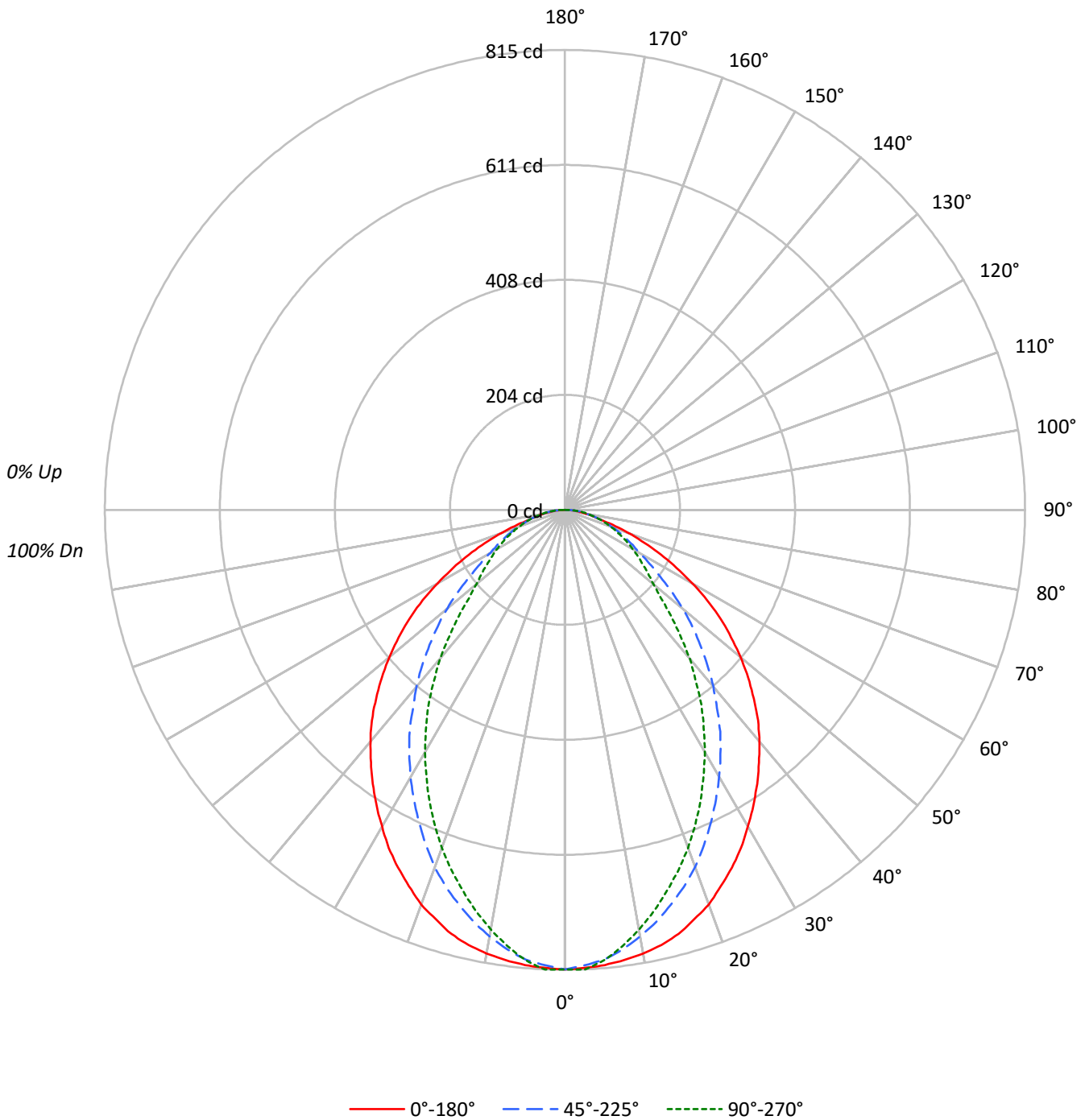
Lumens per Lamp: N/A
Luminaire Lumens: 1570.5 lumens
Efficiency: N/A
Efficacy: 44.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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°	7014	7014	7014
5°	6999	6916	6925
10°	6979	6712	6603
15°	6937	6459	6229
20°	6823	6175	5841
25°	6647	5811	5402
30°	6442	5434	4930
35°	6238	5041	4427
40°	6025	4594	3862
45°	5758	4126	3228
50°	5436	3641	2732
55°	5058	3090	2528
60°	4483	2621	2390
65°	3822	2419	2262
70°	2989	2241	2145
75°	2040	2069	2069
80°	1755	1944	1993
85°	1512	1887	2085

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5758 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	4.8
10°-20°	205.8	13.1
20°-30°	285.7	18.2
30°-40°	306.3	19.5
40°-50°	271.3	17.3
50°-60°	204.5	13.0
60°-70°	132.4	8.4
70°-80°	67.9	4.3
80°-90°	20.9	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°	567.3	36.1
0°-40°	873.5	55.6
0°-60°	1349.3	85.9
0°-90°	1570.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1570.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	810	811	800	801	801	77
15°	778	761	724	706	699	219
25°	700	662	612	579	568	322
35°	593	540	480	436	421	371
45°	473	412	339	286	265	365
55°	337	280	206	173	168	299
65°	188	151	119	112	111	186
75°	61	64	62	62	62	72
85°	15	16	19	21	21	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	814.5	814.5	814.5	814.5	814.5
2.5°	812.6	815.4	807.8	813.5	815.4
5°	809.7	810.6	800.1	801.1	801.1
7.5°	804.9	803.0	785.8	781.0	780.0
10°	798.2	792.5	767.6	758.0	755.1
12.5°	789.6	779.1	747.5	734.1	728.3
15°	778.1	760.9	724.5	706.3	698.7
17.5°	760.9	738.9	700.6	677.6	669.0
20°	744.6	714.9	673.8	645.1	637.4
22.5°	721.6	690.1	643.2	612.5	603.0
25°	699.6	662.3	611.6	579.0	568.5
27.5°	675.7	633.6	579.0	544.6	531.2
30°	647.9	603.0	546.5	510.1	495.8
32.5°	621.1	573.3	513.0	472.8	457.5
35°	593.4	539.8	479.5	436.4	421.1
37.5°	564.7	508.2	442.2	400.1	380.0
40°	536.0	476.6	408.7	360.8	343.6
42.5°	506.3	444.1	374.2	324.5	302.4
45°	472.8	411.5	338.8	286.2	265.1
47.5°	440.3	380.0	306.3	248.8	229.7
50°	405.8	346.5	271.8	216.3	203.9
52.5°	371.3	312.0	238.3	191.4	185.7
55°	336.9	280.4	205.8	173.2	168.4
57.5°	298.6	247.9	177.1	157.0	153.1
60°	260.3	212.5	152.2	141.6	138.8
62.5°	223.0	181.8	134.9	126.3	124.4
65°	187.6	151.2	118.7	112.0	111.0
67.5°	153.1	124.4	103.4	99.5	97.6
70°	118.7	99.5	89.0	87.1	85.2
72.5°	88.1	80.4	75.6	74.7	73.7
75°	61.3	64.1	62.2	62.2	62.2
77.5°	48.8	49.8	50.7	51.7	50.7
80°	35.4	38.3	39.2	41.2	40.2
82.5°	24.9	26.8	29.7	30.6	31.6
85°	15.3	16.3	19.1	21.1	21.1
87.5°	6.7	7.7	9.6	11.5	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)