

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: P1060545

Luminaire Tested: S124RDR-S795D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D830-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

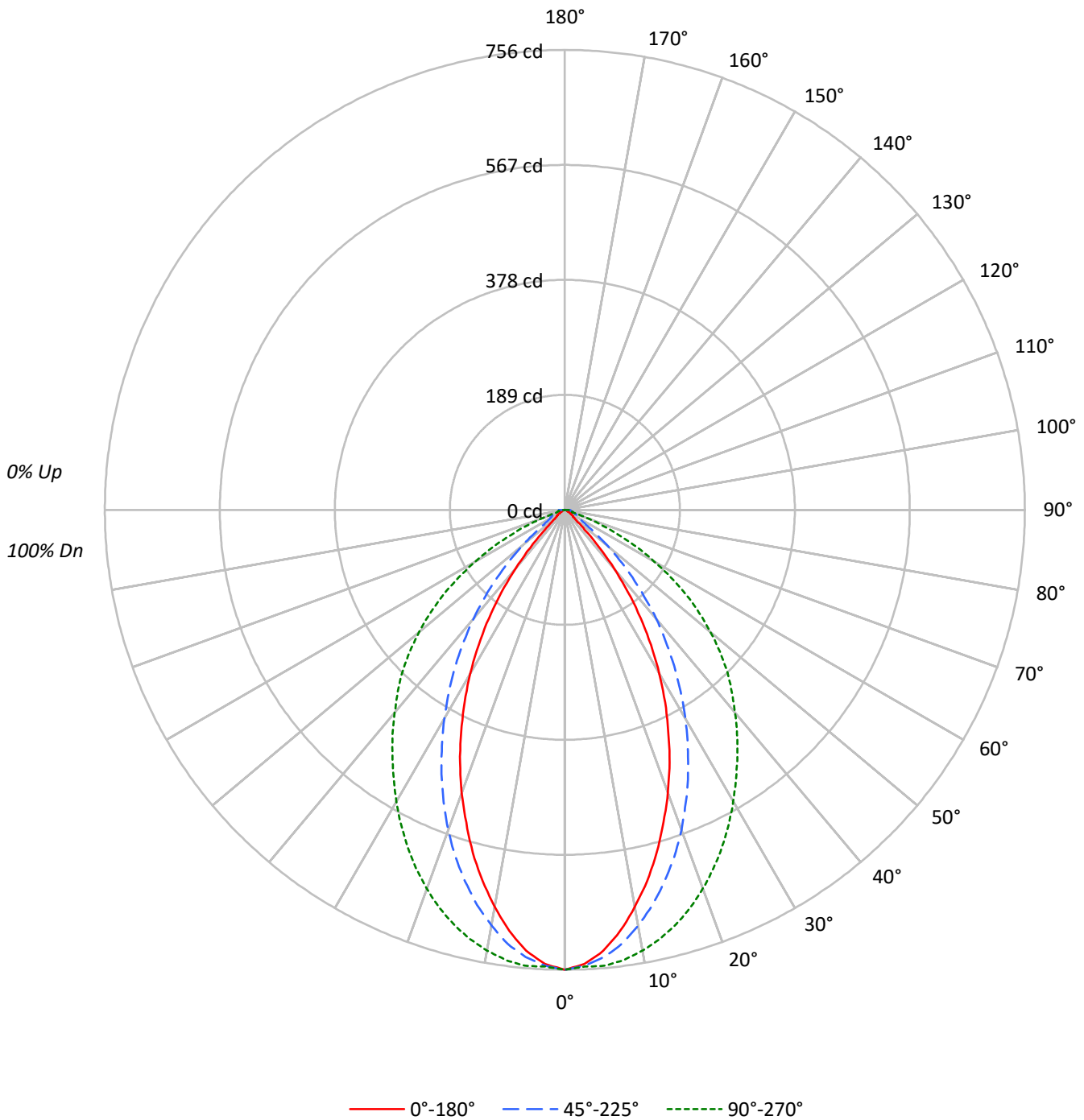
Lumens per Lamp: N/A
Luminaire Lumens: 952.8 lumens
Efficiency: N/A
Efficacy: 36.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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					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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6510	6510	6510
5°	6289	6381	6504
10°	5796	6067	6432
15°	5205	5640	6289
20°	4537	5131	6074
25°	3827	4552	5808
30°	3088	3935	5506
35°	2285	3292	5195
40°	1416	2624	4888
45°	561	1913	4603
50°	249	1200	4184
55°	200	626	3663
60°	138	474	2919
65°	90	471	2007
70°	88	425	939
75°	116	413	413
80°	174	486	486
85°	346	968	701

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4603 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	7.3
10°-20°	179.0	18.8
20°-30°	225.9	23.7
30°-40°	207.3	21.8
40°-50°	141.2	14.8
50°-60°	76.9	8.1
60°-70°	33.3	3.5
70°-80°	12.1	1.3
80°-90°	7.8	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°	474.2	49.8
0°-40°	681.5	71.5
0°-60°	899.5	94.4
0°-90°	952.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	952.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	728	737	738	746	752	67
15°	584	604	633	678	705	162
25°	403	431	479	555	611	184
35°	217	249	313	413	494	134
45°	46	77	157	279	378	43
55°	13	14	42	154	244	12
65°	4	6	23	48	98	5
75°	4	12	12	12	12	4
85°	4	8	10	10	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	756.0	756.0	756.0	756.0	756.0
2.5°	747.1	756.0	749.8	751.5	751.5
5°	727.6	737.3	738.2	746.2	752.4
7.5°	698.3	712.5	719.6	735.6	746.2
10°	662.8	679.7	693.9	721.4	735.6
12.5°	624.7	644.2	665.5	701.8	722.3
15°	583.8	604.2	632.6	677.9	705.4
17.5°	538.6	563.4	598.0	652.2	685.9
20°	495.1	520.0	559.9	621.1	662.8
22.5°	449.9	475.6	520.0	588.3	638.0
25°	402.8	431.2	479.1	555.4	611.3
27.5°	356.7	386.9	437.4	520.8	583.0
30°	310.6	340.7	395.7	485.3	553.7
32.5°	263.5	294.6	354.0	448.1	523.5
35°	217.4	249.3	313.2	412.6	494.2
37.5°	170.4	204.1	272.4	378.0	464.9
40°	126.0	159.7	233.4	343.4	434.8
42.5°	84.3	118.0	193.4	309.7	406.4
45°	46.1	77.2	157.1	278.6	378.0
47.5°	24.8	42.6	121.6	248.4	346.0
50°	18.6	23.1	89.6	216.5	312.3
52.5°	16.0	17.7	62.1	182.8	278.6
55°	13.3	14.2	41.7	153.5	244.0
57.5°	10.6	11.5	31.1	124.2	206.7
60°	8.0	9.8	27.5	95.8	169.5
62.5°	6.2	8.0	25.7	70.1	134.0
65°	4.4	6.2	23.1	47.9	98.5
67.5°	4.4	7.1	19.5	31.1	66.5
70°	3.5	9.8	16.9	20.4	37.3
72.5°	3.5	10.6	14.2	14.2	14.2
75°	3.5	11.5	12.4	12.4	12.4
77.5°	3.5	10.6	11.5	10.6	10.6
80°	3.5	9.8	9.8	9.8	9.8
82.5°	3.5	8.9	9.8	9.8	8.0
85°	3.5	8.0	9.8	9.8	7.1
87.5°	2.7	8.0	8.9	8.9	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)