

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: P1060543

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060543
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
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-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

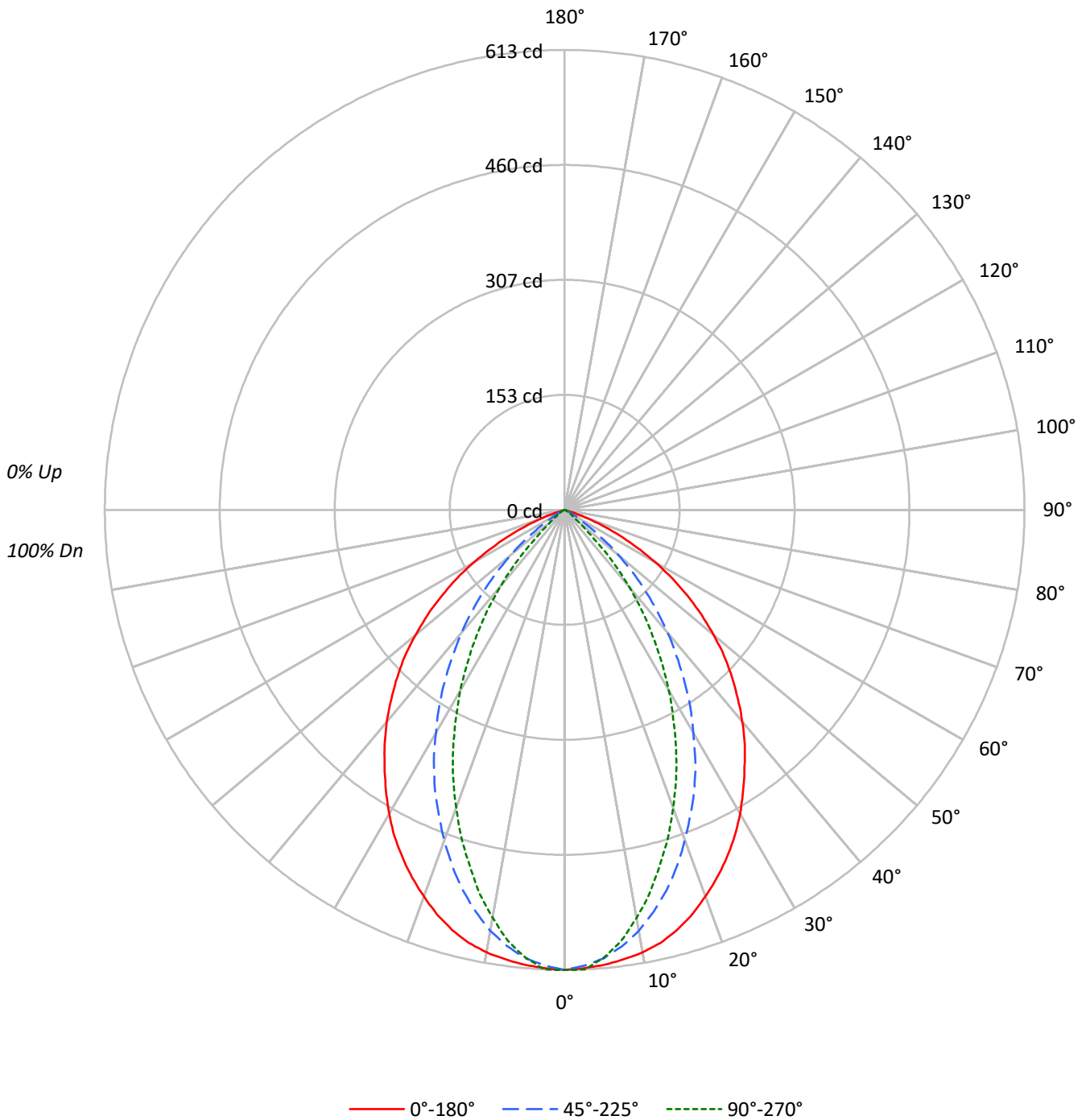
Lumens per Lamp: N/A
Luminaire Lumens: 800.7 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5280	5280	5280
5°	5262	5186	5178
10°	5238	4982	4828
15°	5166	4677	4368
20°	5026	4296	3874
25°	4858	3890	3343
30°	4652	3410	2766
35°	4397	2925	2152
40°	4143	2401	1504
45°	3842	1845	744
50°	3467	1246	249
55°	2994	638	173
60°	2396	229	122
65°	1642	126	55
70°	735	68	45
75°	0	30	30
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	7.1
10°-20°	148.4	18.5
20°-30°	192.2	24.0
30°-40°	182.6	22.8
40°-50°	129.3	16.1
50°-60°	66.4	8.3
60°-70°	23.2	2.9
70°-80°	2.0	0.3
80°-90°	0.0	0.0
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°	397.2	49.6
0°-40°	579.8	72.4
0°-60°	775.5	96.8
0°-90°	800.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	613	613	613	613	613	
5°	609	610	600	600	599	58
15°	580	562	525	500	490	163
25°	511	471	409	366	352	235
35°	418	357	278	224	205	262
45°	316	243	152	87	61	243
55°	199	131	42	12	12	178
65°	81	39	6	4	3	80
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.2	613.2	613.2	613.2	613.2
2.5°	611.4	613.2	607.9	612.3	613.2
5°	608.8	609.7	599.9	599.9	599.0
7.5°	604.3	602.6	586.6	580.4	579.5
10°	599.0	592.8	569.8	556.5	552.1
12.5°	591.1	579.5	548.5	529.0	523.7
15°	579.5	561.8	524.6	499.8	490.0
17.5°	565.4	542.3	498.0	467.9	458.1
20°	548.5	519.3	468.8	435.1	422.7
22.5°	530.8	497.1	438.6	400.5	388.1
25°	511.3	471.4	409.4	366.0	351.8
27.5°	490.9	444.0	377.5	332.3	313.7
30°	467.9	416.5	342.9	296.0	278.2
32.5°	443.1	386.4	311.9	261.4	240.1
35°	418.3	357.1	278.2	224.2	204.7
37.5°	394.3	329.6	244.6	187.9	169.3
40°	368.6	299.5	213.6	155.1	133.8
42.5°	342.0	270.3	181.7	121.4	98.4
45°	315.5	242.8	151.5	86.8	61.1
47.5°	288.9	213.6	122.3	54.9	32.8
50°	258.8	185.2	93.0	29.2	18.6
52.5°	230.4	158.6	66.5	16.8	14.2
55°	199.4	131.1	42.5	12.4	11.5
57.5°	170.1	104.6	23.9	9.7	8.9
60°	139.1	80.6	13.3	8.0	7.1
62.5°	108.1	58.5	8.9	5.3	4.4
65°	80.6	39.0	6.2	3.5	2.7
67.5°	53.2	22.2	4.4	1.8	1.8
70°	29.2	10.6	2.7	1.8	1.8
72.5°	10.6	3.5	1.8	0.9	0.9
75°	0.0	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)