

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: P1060303

Luminaire Tested: S124RDR-S1195D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060303
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

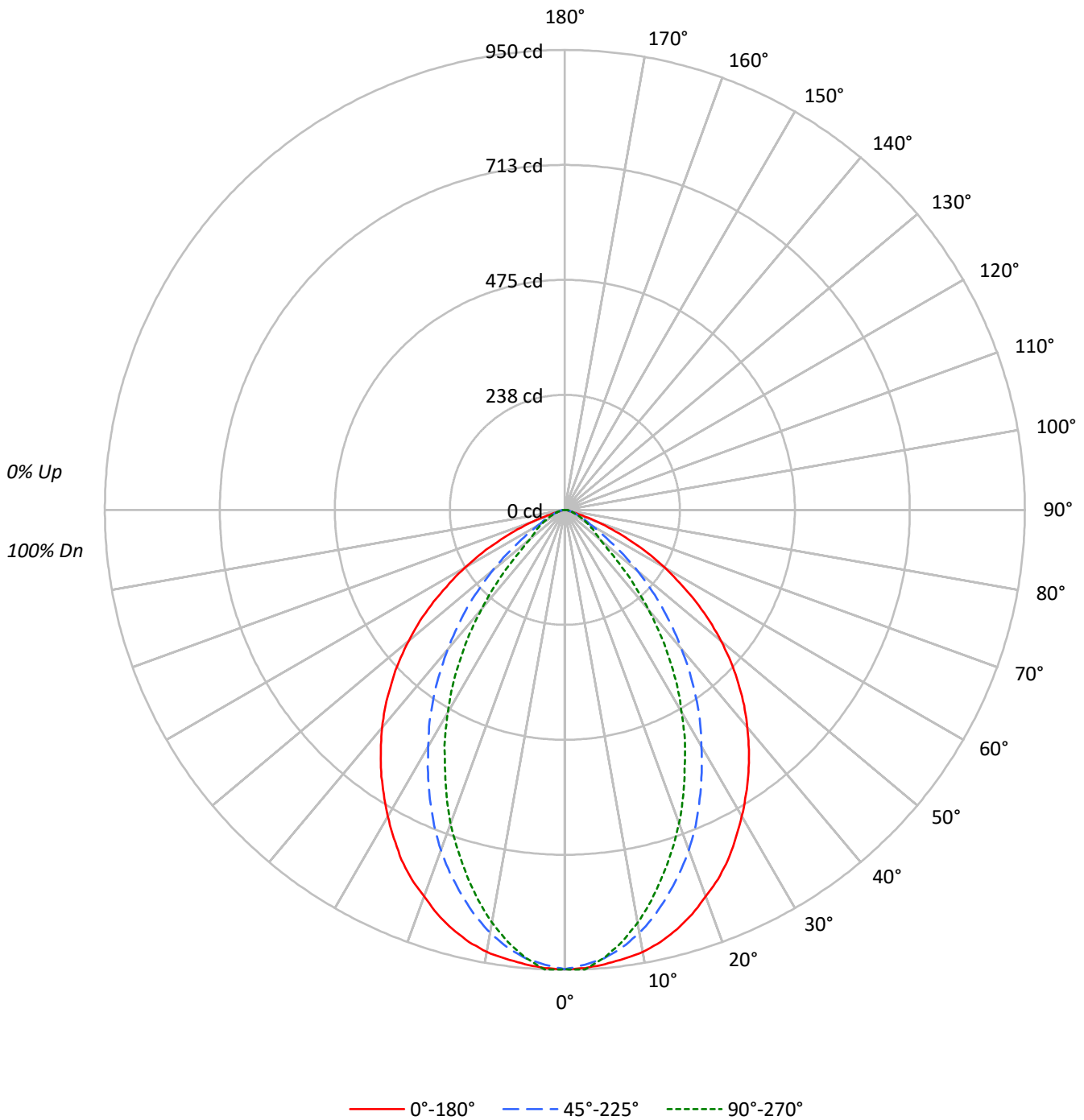
Lumens per Lamp: N/A
Luminaire Lumens: 1399.0 lumens
Efficiency: N/A
Efficacy: 33.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57				
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47				
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43				
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8171	8171	8171
5°	8144	8040	8029
10°	8110	7759	7572
15°	7994	7339	6970
20°	7789	6858	6319
25°	7580	6260	5562
30°	7269	5608	4797
35°	6954	4960	3962
40°	6595	4221	3005
45°	6168	3450	2018
50°	5640	2614	1253
55°	4956	1725	1063
60°	4097	1059	875
65°	2969	817	707
70°	1614	607	539
75°	356	446	489
80°	263	332	397
85°	267	267	395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6168 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	6.3
10°-20°	233.5	16.7
20°-30°	309.3	22.1
30°-40°	307.0	21.9
40°-50°	236.2	16.9
50°-60°	140.8	10.1
60°-70°	64.0	4.6
70°-80°	16.6	1.2
80°-90°	3.7	0.3
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°	630.7	45.1
0°-40°	937.7	67.0
0°-60°	1314.7	94.0
0°-90°	1399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1399.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	942	944	930	930	929	89
15°	897	874	823	795	782	252
25°	798	740	659	604	585	366
35°	662	579	472	400	377	413
45°	506	408	283	198	166	390
55°	330	235	115	72	71	294
65°	146	87	40	35	35	146
75°	11	13	13	15	15	22
85°	3	3	3	4	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	948.9	948.9	948.9	948.9	948.9
2.5°	947.5	948.9	940.8	947.5	950.2
5°	942.2	943.5	930.1	930.1	928.8
7.5°	935.5	932.8	911.4	903.4	900.7
10°	927.5	918.1	887.4	871.3	866.0
12.5°	914.1	899.4	858.0	835.3	825.9
15°	896.7	874.0	823.2	795.2	781.8
17.5°	875.4	847.3	787.1	751.1	736.4
20°	850.0	812.5	748.4	703.0	689.6
22.5°	825.9	779.1	705.6	653.5	638.8
25°	797.8	740.4	658.9	604.1	585.4
27.5°	764.4	703.0	612.1	555.9	537.2
30°	731.0	662.9	564.0	505.2	482.4
32.5°	696.3	621.4	519.9	453.0	431.7
35°	661.5	578.7	471.8	399.6	376.9
37.5°	624.1	535.9	423.6	348.8	323.4
40°	586.7	494.5	375.5	299.4	267.3
42.5°	547.9	451.7	328.8	248.6	216.5
45°	506.5	407.6	283.3	197.8	165.7
47.5°	465.1	366.2	237.9	148.3	118.9
50°	421.0	322.1	195.1	108.2	93.5
52.5°	376.9	279.3	152.4	84.2	80.2
55°	330.1	235.2	114.9	72.2	70.8
57.5°	282.0	195.1	82.9	62.8	60.1
60°	237.9	157.7	61.5	53.5	50.8
62.5°	192.4	118.9	50.8	44.1	41.4
65°	145.7	86.9	40.1	34.7	34.7
67.5°	105.6	58.8	32.1	28.1	26.7
70°	64.1	36.1	24.1	22.7	21.4
72.5°	32.1	21.4	18.7	17.4	17.4
75°	10.7	13.4	13.4	14.7	14.7
77.5°	8.0	9.4	9.4	10.7	10.7
80°	5.3	6.7	6.7	8.0	8.0
82.5°	4.0	4.0	5.3	5.3	6.7
85°	2.7	2.7	2.7	4.0	4.0
87.5°	1.3	1.3	1.3	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)