

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: P1060311

Luminaire Tested: S124RDR-S1195D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060311
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-S1195D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

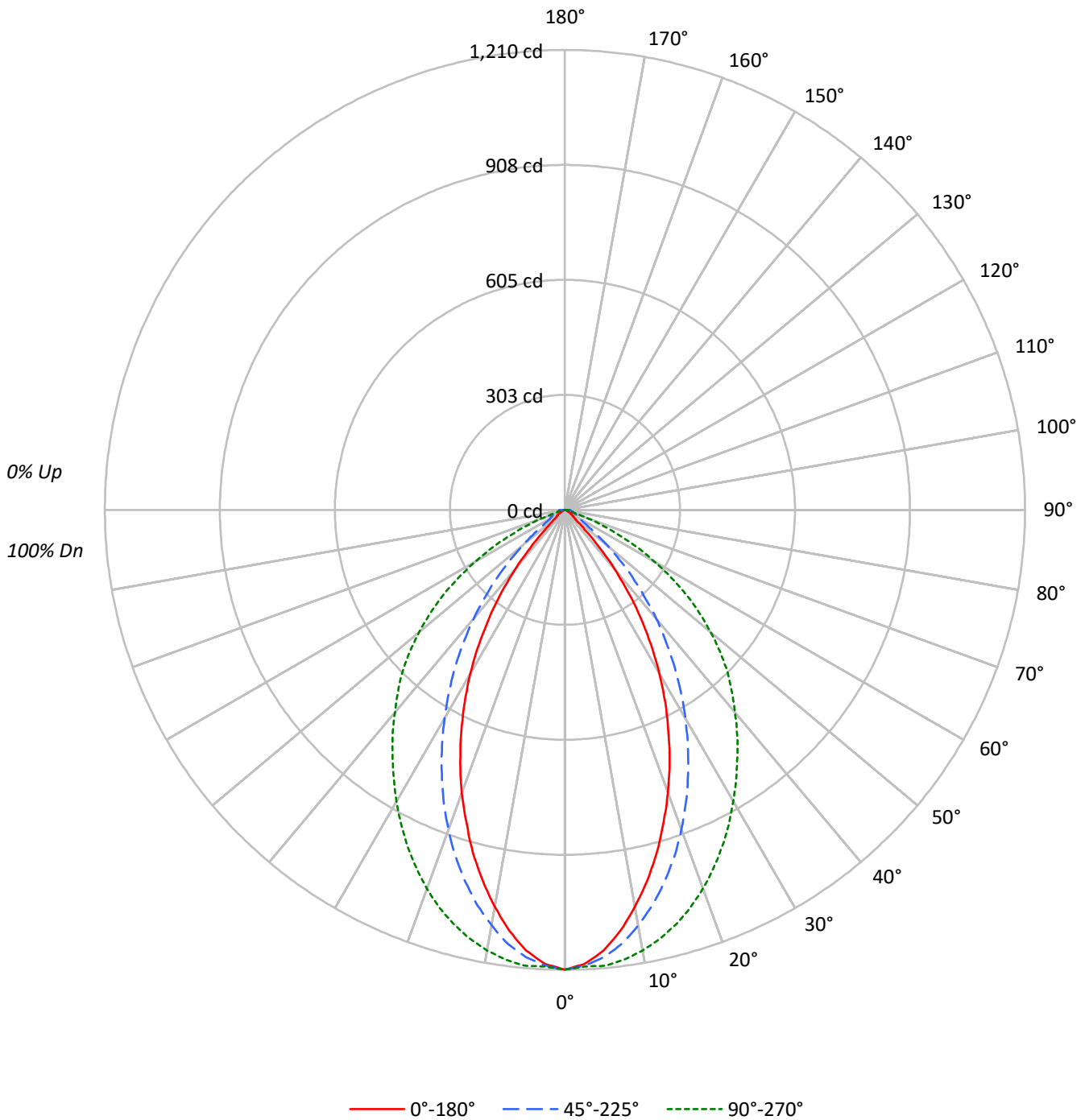
Lumens per Lamp: N/A
Luminaire Lumens: 1524.5 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10416	10416	10416
5°	10063	10210	10407
10°	9274	9708	10292
15°	8328	9025	10062
20°	7260	8210	9719
25°	6125	7285	9294
30°	4941	6296	8809
35°	3656	5269	8313
40°	2266	4197	7820
45°	899	3060	7365
50°	399	1921	6696
55°	320	1001	5861
60°	220	758	4671
65°	145	752	3211
70°	144	680	1501
75°	190	662	662
80°	283	774	774
85°	563	1541	1126

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7365 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	7.3
10°-20°	286.4	18.8
20°-30°	361.5	23.7
30°-40°	331.6	21.8
40°-50°	225.9	14.8
50°-60°	123.0	8.1
60°-70°	53.2	3.5
70°-80°	19.4	1.3
80°-90°	12.5	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°	758.8	49.8
0°-40°	1090.5	71.5
0°-60°	1439.4	94.4
0°-90°	1524.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1524.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1164	1180	1181	1194	1204	108
15°	934	967	1012	1085	1129	260
25°	645	690	767	889	978	294
35°	348	399	501	660	791	215
45°	74	124	251	446	605	69
55°	21	23	67	246	390	19
65°	7	10	37	77	158	8
75°	6	18	20	20	20	6
85°	6	13	16	16	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.6	1209.6	1209.6	1209.6	1209.6
2.5°	1195.4	1209.6	1199.7	1202.5	1202.5
5°	1164.2	1179.8	1181.2	1194.0	1203.9
7.5°	1117.3	1140.1	1151.4	1177.0	1194.0
10°	1060.6	1087.5	1110.2	1154.3	1177.0
12.5°	999.5	1030.7	1064.8	1123.0	1155.7
15°	934.2	966.8	1012.3	1084.7	1128.7
17.5°	861.8	901.5	956.9	1043.5	1097.5
20°	792.2	832.0	895.9	993.8	1060.6
22.5°	719.8	761.0	832.0	941.3	1020.8
25°	644.6	690.0	766.7	888.8	978.2
27.5°	570.7	619.0	699.9	833.4	932.8
30°	496.9	545.2	633.2	776.6	885.9
32.5°	421.7	471.4	566.5	717.0	837.7
35°	347.8	398.9	501.2	660.2	790.8
37.5°	272.6	326.5	435.9	604.8	743.9
40°	201.6	255.6	373.4	549.4	695.7
42.5°	134.9	188.8	309.5	495.5	650.2
45°	73.8	123.5	251.3	445.8	604.8
47.5°	39.8	68.1	194.5	397.5	553.7
50°	29.8	36.9	143.4	346.4	499.8
52.5°	25.6	28.4	99.4	292.5	445.8
55°	21.3	22.7	66.7	245.6	390.4
57.5°	17.0	18.5	49.7	198.8	330.8
60°	12.8	15.6	44.0	153.3	271.2
62.5°	9.9	12.8	41.2	112.2	214.4
65°	7.1	9.9	36.9	76.7	157.6
67.5°	7.1	11.4	31.2	49.7	106.5
70°	5.7	15.6	27.0	32.7	59.6
72.5°	5.7	17.0	22.7	22.7	22.7
75°	5.7	18.5	19.9	19.9	19.9
77.5°	5.7	17.0	18.5	17.0	17.0
80°	5.7	15.6	15.6	15.6	15.6
82.5°	5.7	14.2	15.6	15.6	12.8
85°	5.7	12.8	15.6	15.6	11.4
87.5°	4.3	12.8	14.2	14.2	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)