

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: P1060334

Luminaire Tested: S124RDR-S1195D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060334
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

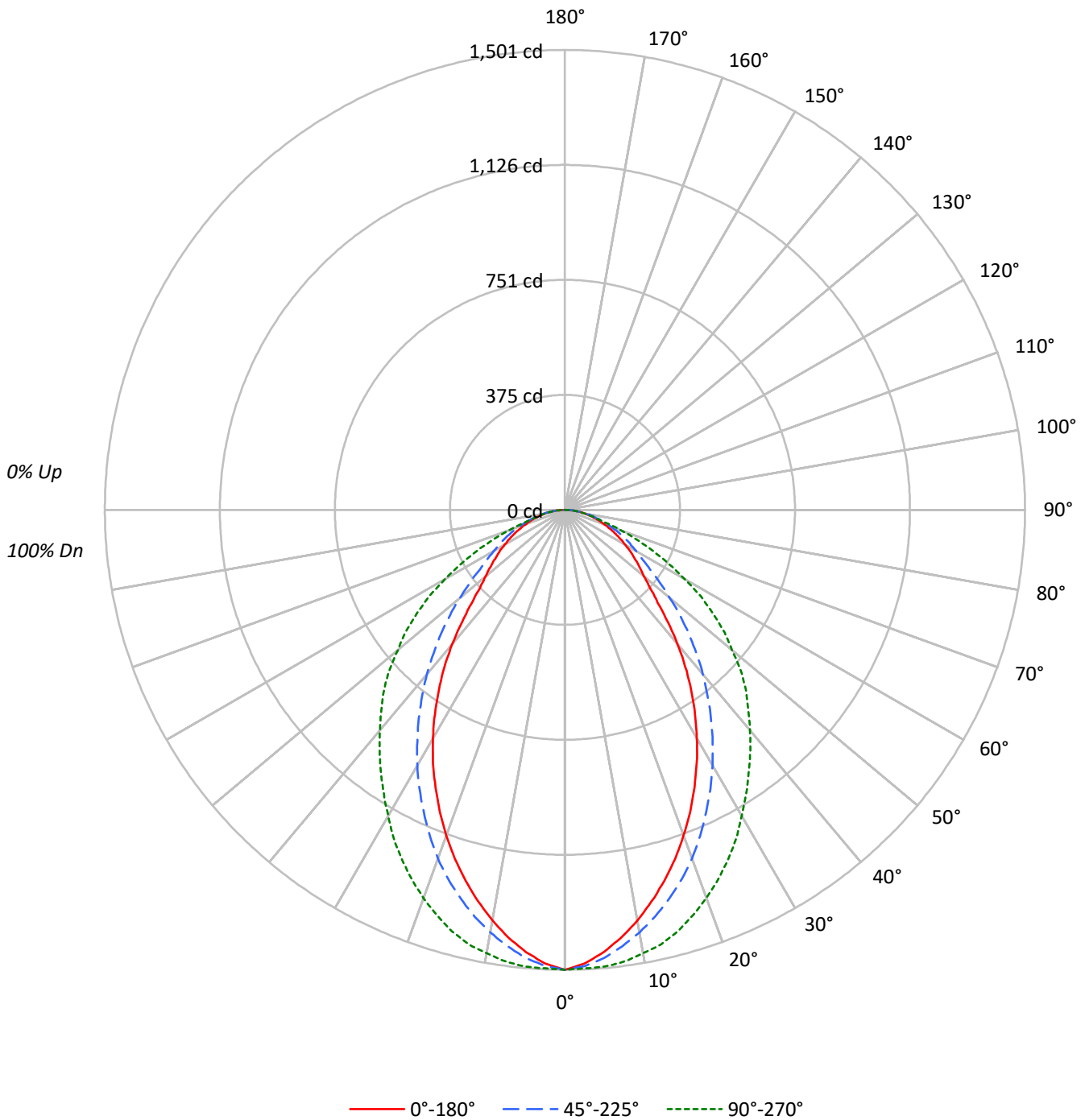
Lumens per Lamp: N/A
Luminaire Lumens: 2732.6 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12925	12925	12925
5°	12525	12689	12933
10°	11900	12244	12849
15°	11165	11712	12694
20°	10366	11102	12356
25°	9493	10344	11959
30°	8557	9574	11467
35°	7541	8733	10999
40°	6420	7870	10559
45°	5211	6955	10173
50°	4511	5986	9526
55°	4181	5079	8834
60°	3903	4579	7750
65°	3655	4295	6443
70°	3406	3960	4872
75°	3244	3663	3507
80°	3045	3357	2965
85°	2796	3112	2332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10173 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.6	5.1
10°-20°	372.5	13.6
20°-30°	508.6	18.6
30°-40°	532.8	19.5
40°-50°	461.2	16.9
50°-60°	346.6	12.7
60°-70°	223.5	8.2
70°-80°	114.6	4.2
80°-90°	34.2	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°	1019.7	37.3
0°-40°	1552.5	56.8
0°-60°	2360.3	86.4
0°-90°	2732.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2732.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1501	1501	1501	1501	1501	
5°	1449	1471	1468	1479	1496	136
15°	1252	1284	1314	1374	1424	351
25°	999	1037	1089	1174	1259	458
35°	717	758	831	941	1046	447
45°	428	472	571	711	835	337
55°	278	288	338	483	588	250
65°	179	182	211	255	316	178
75°	98	109	110	109	105	103
85°	28	33	32	30	24	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1501.0	1501.0	1501.0	1501.0	1501.0
2.5°	1482.1	1501.0	1489.9	1493.1	1497.8
5°	1449.0	1471.1	1467.9	1478.9	1496.2
7.5°	1408.1	1431.7	1436.4	1461.6	1486.8
10°	1360.9	1387.7	1400.3	1438.0	1469.5
12.5°	1309.0	1337.3	1359.4	1406.6	1452.2
15°	1252.4	1283.8	1313.7	1373.5	1423.9
17.5°	1194.2	1225.6	1265.0	1331.0	1387.7
20°	1131.2	1165.8	1211.5	1280.7	1348.3
22.5°	1066.7	1102.9	1151.7	1227.2	1305.9
25°	999.1	1036.8	1088.7	1173.7	1258.7
27.5°	931.4	969.2	1027.4	1117.1	1209.9
30°	860.6	899.9	962.9	1060.4	1153.2
32.5°	789.8	832.3	896.8	1000.6	1099.8
35°	717.4	758.3	830.7	940.8	1046.3
37.5°	645.1	687.5	764.6	882.6	992.8
40°	571.1	615.2	700.1	824.4	939.3
42.5°	497.2	544.4	634.1	764.6	885.8
45°	427.9	472.0	571.1	711.1	835.4
47.5°	376.0	405.9	508.2	659.2	778.8
50°	336.7	352.4	446.8	602.6	711.1
52.5°	306.8	317.8	390.2	541.2	656.1
55°	278.5	287.9	338.3	483.0	588.4
57.5°	253.3	258.0	298.9	426.4	523.9
60°	226.6	231.3	265.9	365.0	450.0
62.5°	203.0	206.1	239.1	306.8	382.3
65°	179.4	182.5	210.8	254.9	316.2
67.5°	157.3	162.1	184.1	207.7	251.7
70°	135.3	144.7	157.3	168.3	193.5
72.5°	116.4	125.9	132.2	135.3	136.9
75°	97.5	108.6	110.1	108.6	105.4
77.5°	78.7	88.1	88.1	85.0	81.8
80°	61.4	69.2	67.7	64.5	59.8
82.5°	45.6	50.3	48.8	45.6	40.9
85°	28.3	33.0	31.5	29.9	23.6
87.5°	14.2	18.9	17.3	15.7	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)