

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: P1060308

Luminaire Tested: S124RDR-S1195D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060308  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S1195D830-X4F0-XX-UDD-WVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

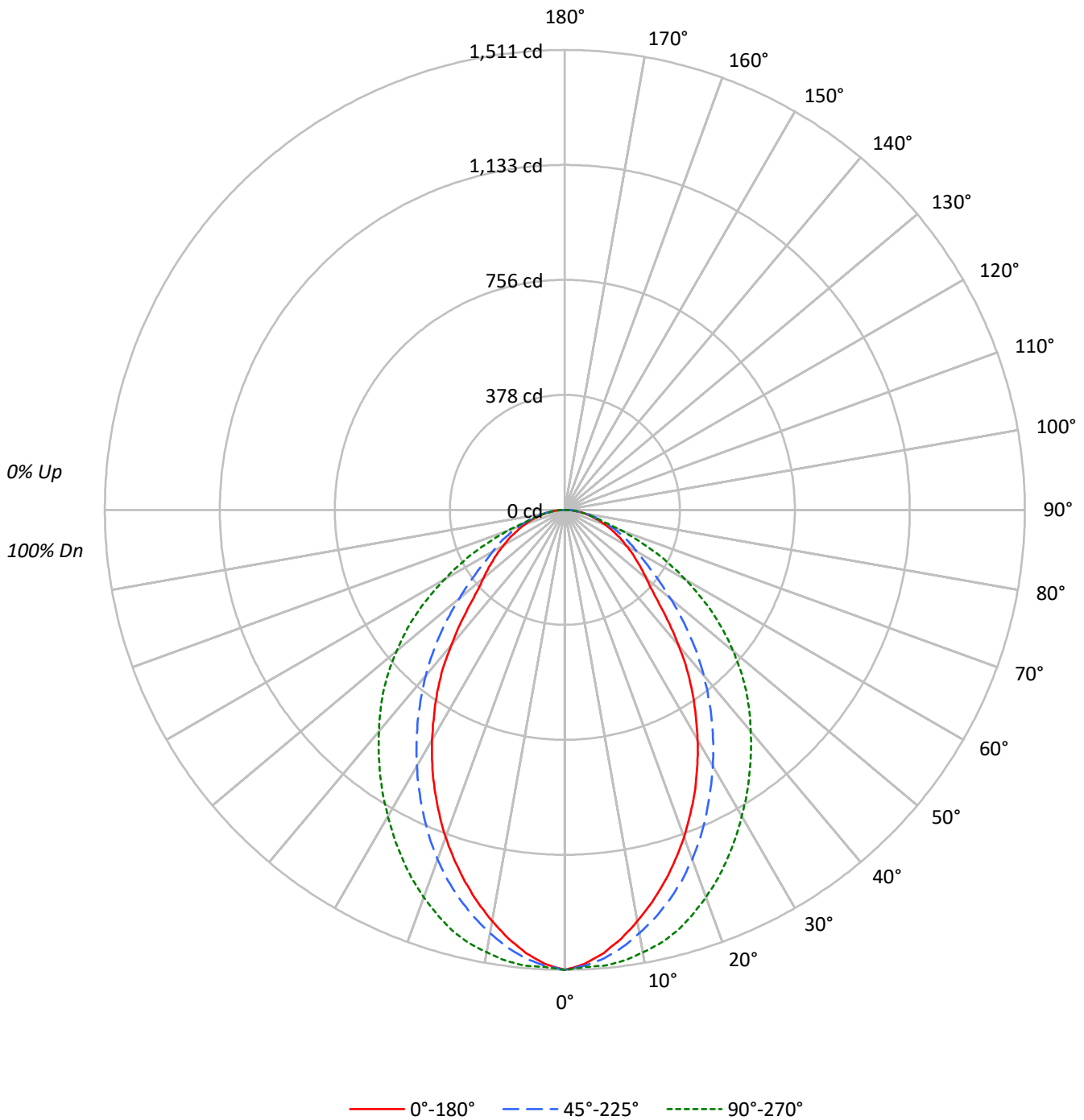
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2772.9 lumens  
Efficiency: N/A  
Efficacy: 66.3 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
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				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65				65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57				57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50				50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37				37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13013	13013	13013
5°	12635	12785	12994
10°	11998	12348	12910
15°	11278	11827	12757
20°	10491	11201	12414
25°	9619	10457	12008
30°	8670	9667	11555
35°	7676	8843	11120
40°	6524	7982	10673
45°	5341	7052	10260
50°	4675	6055	9656
55°	4297	5220	8934
60°	3985	4698	7877
65°	3733	4413	6594
70°	3502	4041	4950
75°	3294	3693	3603
80°	3050	3382	3050
85°	2776	3300	2638

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10260 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.7	5.0
10°-20°	375.8	13.6
20°-30°	513.6	18.5
30°-40°	539.8	19.5
40°-50°	468.5	16.9
50°-60°	353.4	12.7
60°-70°	229.1	8.3
70°-80°	117.6	4.2
80°-90°	35.6	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°	1029.1	37.1
0°-40°	1568.9	56.6
0°-60°	2390.7	86.2
0°-90°	2772.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2772.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1511	1511	1511	1511	1511	
5°	1462	1482	1479	1491	1503	137
15°	1265	1296	1327	1387	1431	355
25°	1012	1048	1101	1185	1264	464
35°	730	770	841	954	1058	454
45°	439	480	579	724	842	345
55°	286	294	348	494	595	258
65°	183	187	217	262	324	182
75°	99	111	111	112	108	105
85°	28	35	33	32	27	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1511.2	1511.2	1511.2	1511.2	1511.2
2.5°	1493.8	1512.5	1499.2	1501.8	1503.2
5°	1461.7	1481.8	1479.1	1491.1	1503.2
7.5°	1420.3	1444.3	1449.7	1473.7	1493.8
10°	1372.1	1398.9	1412.2	1451.0	1476.4
12.5°	1321.3	1348.0	1372.1	1421.6	1457.7
15°	1265.1	1295.9	1326.6	1386.8	1431.0
17.5°	1206.3	1238.4	1277.2	1342.7	1394.8
20°	1144.8	1176.9	1222.3	1293.2	1354.7
22.5°	1079.2	1115.3	1163.5	1239.7	1311.9
25°	1012.4	1048.5	1100.6	1184.9	1263.8
27.5°	942.8	980.3	1036.4	1130.1	1214.3
30°	871.9	912.1	972.2	1071.2	1162.1
32.5°	799.7	842.5	906.7	1012.4	1111.3
35°	730.2	770.3	841.2	953.5	1057.8
37.5°	658.0	698.1	774.3	896.0	1004.3
40°	580.4	624.5	710.1	835.8	949.5
42.5°	508.2	552.3	644.6	778.3	897.4
45°	438.6	480.1	579.1	723.5	842.5
47.5°	385.2	414.6	513.5	670.0	783.7
50°	349.0	362.4	452.0	611.2	720.8
52.5°	316.9	327.6	395.9	552.3	659.3
55°	286.2	294.2	347.7	493.5	595.1
57.5°	259.4	263.5	304.9	434.6	525.6
60°	231.4	236.7	272.8	374.5	457.4
62.5°	208.6	211.3	244.7	316.9	389.2
65°	183.2	187.2	216.6	262.1	323.6
67.5°	160.5	167.2	187.2	214.0	255.4
70°	139.1	148.4	160.5	173.9	196.6
72.5°	119.0	129.7	136.4	141.8	137.7
75°	99.0	111.0	111.0	112.3	108.3
77.5°	80.2	90.9	89.6	88.3	82.9
80°	61.5	70.9	68.2	66.9	61.5
82.5°	45.5	52.2	49.5	48.1	41.5
85°	28.1	34.8	33.4	32.1	26.7
87.5°	13.4	20.1	18.7	17.4	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)