

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: P1060302

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060302
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-S1195D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

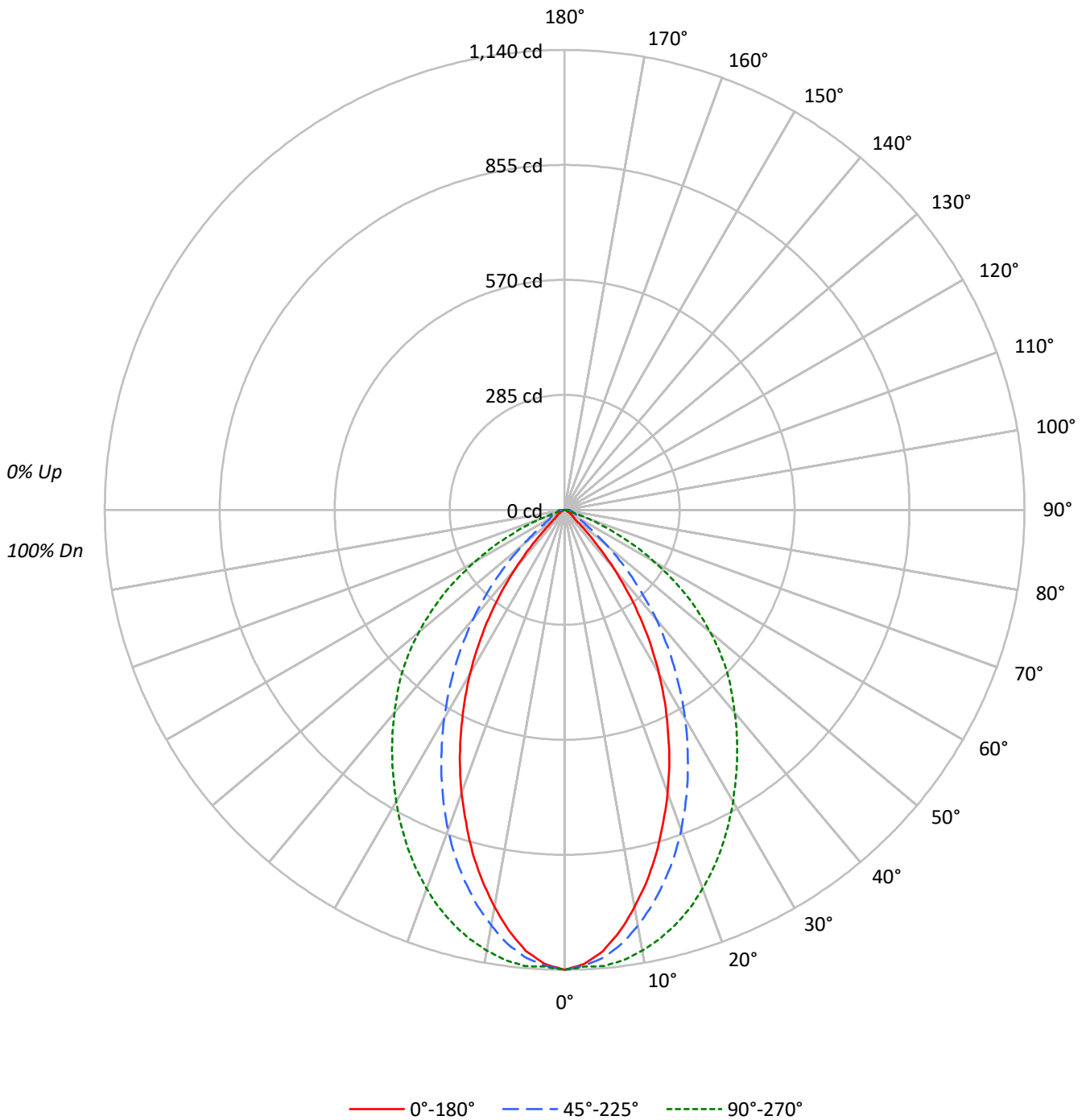
Lumens per Lamp: N/A
Luminaire Lumens: 1436.9 lumens
Efficiency: N/A
Efficacy: 34.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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°	9818	9818	9818
5°	9485	9624	9809
10°	8740	9150	9700
15°	7850	8506	9484
20°	6843	7738	9160
25°	5772	6866	8760
30°	4657	5934	8303
35°	3447	4966	7836
40°	2136	3956	7371
45°	848	2885	6943
50°	376	1811	6310
55°	302	944	5525
60°	207	715	4402
65°	137	709	3026
70°	136	640	1415
75°	180	622	622
80°	268	729	729
85°	534	1452	1057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6943 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.6	7.3
10°-20°	269.9	18.8
20°-30°	340.7	23.7
30°-40°	312.6	21.8
40°-50°	212.9	14.8
50°-60°	116.0	8.1
60°-70°	50.2	3.5
70°-80°	18.3	1.3
80°-90°	11.8	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°	715.2	49.8
0°-40°	1027.8	71.5
0°-60°	1356.7	94.4
0°-90°	1436.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1436.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1140	1140	1140	1140	1140	
5°	1097	1112	1113	1125	1135	102
15°	880	911	954	1022	1064	245
25°	608	650	723	838	922	278
35°	328	376	472	622	745	203
45°	70	116	237	420	570	65
55°	20	21	63	232	368	18
65°	7	9	35	72	148	8
75°	5	17	19	19	19	6
85°	5	12	15	15	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1140.1	1140.1	1140.1	1140.1	1140.1
2.5°	1126.7	1140.1	1130.8	1133.4	1133.4
5°	1097.3	1112.0	1113.4	1125.4	1134.8
7.5°	1053.1	1074.6	1085.3	1109.3	1125.4
10°	999.6	1025.0	1046.4	1087.9	1109.3
12.5°	942.1	971.5	1003.6	1058.5	1089.3
15°	880.5	911.3	954.1	1022.4	1063.8
17.5°	812.3	849.7	901.9	983.6	1034.4
20°	746.7	784.2	844.4	936.7	999.6
22.5°	678.5	717.3	784.2	887.2	962.1
25°	607.5	650.4	722.6	837.7	922.0
27.5°	537.9	583.4	659.7	785.5	879.2
30°	468.4	513.9	596.8	732.0	835.0
32.5°	397.4	444.3	533.9	675.8	789.5
35°	327.9	376.0	472.4	622.2	745.4
37.5°	256.9	307.8	410.8	570.1	701.2
40°	190.0	240.9	351.9	517.9	655.7
42.5°	127.1	178.0	291.7	467.0	612.9
45°	69.6	116.4	236.9	420.2	570.1
47.5°	37.5	64.2	183.3	374.7	521.9
50°	28.1	34.8	135.2	326.5	471.0
52.5°	24.1	26.8	93.7	275.7	420.2
55°	20.1	21.4	62.9	231.5	368.0
57.5°	16.1	17.4	46.8	187.3	311.8
60°	12.0	14.7	41.5	144.5	255.6
62.5°	9.4	12.0	38.8	105.7	202.1
65°	6.7	9.4	34.8	72.3	148.5
67.5°	6.7	10.7	29.4	46.8	100.4
70°	5.4	14.7	25.4	30.8	56.2
72.5°	5.4	16.1	21.4	21.4	21.4
75°	5.4	17.4	18.7	18.7	18.7
77.5°	5.4	16.1	17.4	16.1	16.1
80°	5.4	14.7	14.7	14.7	14.7
82.5°	5.4	13.4	14.7	14.7	12.0
85°	5.4	12.0	14.7	14.7	10.7
87.5°	4.0	12.0	13.4	13.4	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)