

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: P1059130

Luminaire Tested: S123RDR-S1165D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

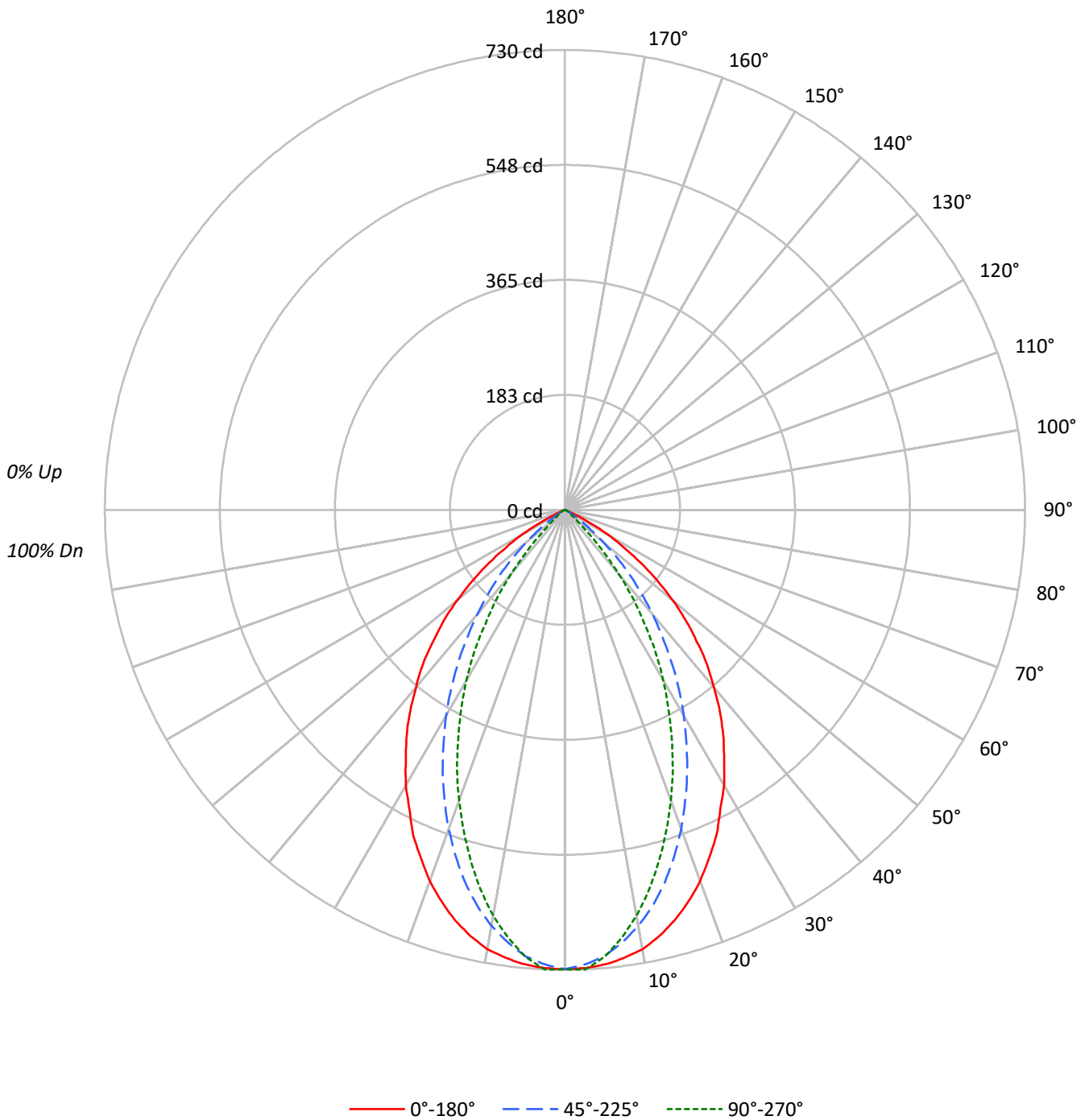
Lumens per Lamp: N/A
Luminaire Lumens: 832.1 lumens
Efficiency: N/A
Efficacy: 19.9 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8563	8563	8563
5°	8540	8388	8402
10°	8443	7995	7799
15°	8194	7437	7010
20°	7836	6735	6133
25°	7379	5948	5188
30°	6846	5110	4236
35°	6279	4224	3148
40°	5633	3313	2016
45°	4914	2418	839
50°	4076	1438	322
55°	3005	602	240
60°	1820	221	139
65°	489	131	64
70°	0	41	41
75°	0	0	54
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4914 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	8.1
10°-20°	173.2	20.8
20°-30°	215.9	25.9
30°-40°	193.1	23.2
40°-50°	121.8	14.6
50°-60°	51.0	6.1
60°-70°	9.6	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	456.3	54.8
0°-40°	649.4	78.0
0°-60°	822.2	98.8
0°-90°	832.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	724	723	712	714	713	69
15°	674	658	612	586	577	189
25°	570	524	459	419	400	261
35°	438	375	295	242	220	273
45°	296	230	146	78	50	228
55°	147	101	29	12	12	132
65°	18	13	5	2	2	25
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.2	729.2	729.2	729.2	729.2
2.5°	728.0	729.2	722.2	729.2	730.4
5°	724.5	723.3	711.6	714.0	712.8
7.5°	717.5	714.0	692.8	688.1	685.8
10°	708.1	698.7	670.5	658.8	654.1
12.5°	692.8	679.9	643.5	624.7	617.7
15°	674.0	657.6	611.8	586.0	576.6
17.5°	651.7	628.2	576.6	548.4	534.3
20°	627.1	594.2	539.0	504.9	490.8
22.5°	597.7	561.3	499.1	462.7	447.4
25°	569.5	523.7	459.1	419.2	400.4
27.5°	534.3	486.1	416.9	375.8	355.8
30°	504.9	449.7	376.9	331.1	312.4
32.5°	469.7	412.2	335.8	285.3	267.7
35°	438.0	374.6	294.7	241.9	219.6
37.5°	403.9	338.2	253.6	198.5	177.3
40°	367.5	301.8	216.1	155.0	131.5
42.5°	334.7	265.4	178.5	115.1	91.6
45°	295.9	230.2	145.6	77.5	50.5
47.5°	260.7	197.3	110.4	43.4	27.0
50°	223.1	163.2	78.7	22.3	17.6
52.5°	184.4	130.3	51.7	15.3	14.1
55°	146.8	101.0	29.4	11.7	11.7
57.5°	110.4	72.8	15.3	9.4	8.2
60°	77.5	48.1	9.4	7.0	5.9
62.5°	44.6	28.2	7.0	4.7	4.7
65°	17.6	12.9	4.7	2.3	2.3
67.5°	1.2	3.5	2.3	1.2	1.2
70°	0.0	0.0	1.2	1.2	1.2
72.5°	0.0	0.0	1.2	1.2	1.2
75°	0.0	0.0	0.0	0.0	1.2
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)