

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: P1060351

Luminaire Tested: S124RDR-S1195D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D930-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

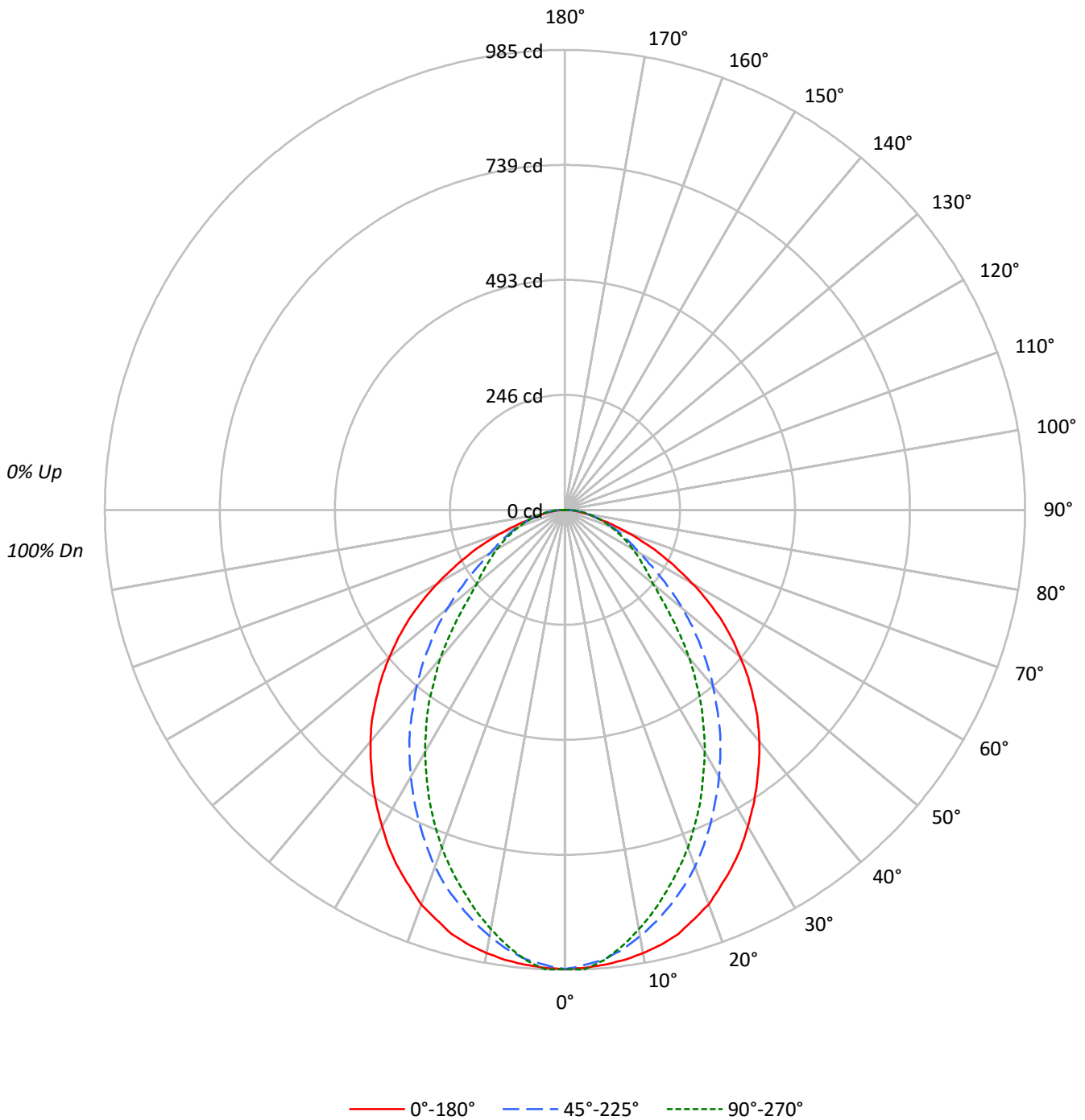
Lumens per Lamp: N/A
Luminaire Lumens: 1896.9 lumens
Efficiency: N/A
Efficacy: 45.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8472	8472	8472
5°	8454	8354	8364
10°	8430	8107	7975
15°	8378	7801	7523
20°	8242	7457	7055
25°	8029	7019	6525
30°	7782	6564	5954
35°	7534	6089	5347
40°	7277	5549	4665
45°	6955	4983	3899
50°	6566	4398	3298
55°	6109	3731	3055
60°	5415	3165	2886
65°	4617	2920	2732
70°	3608	2707	2591
75°	2462	2499	2499
80°	2122	2351	2410
85°	1828	2282	2510

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6955 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	4.8
10°-20°	248.6	13.1
20°-30°	345.1	18.2
30°-40°	369.9	19.5
40°-50°	327.7	17.3
50°-60°	247.0	13.0
60°-70°	159.9	8.4
70°-80°	82.1	4.3
80°-90°	25.2	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°	685.2	36.1
0°-40°	1055.1	55.6
0°-60°	1629.7	85.9
0°-90°	1896.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1896.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	978	979	966	968	968	93
15°	940	919	875	853	844	264
25°	845	800	739	699	687	389
35°	717	652	579	527	509	448
45°	571	497	409	346	320	440
55°	407	339	248	209	204	361
65°	227	183	143	135	134	225
75°	74	78	75	75	75	88
85°	18	20	23	25	25	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.8	983.8	983.8	983.8	983.8
2.5°	981.5	984.9	975.7	982.6	984.9
5°	978.0	979.1	966.4	967.6	967.6
7.5°	972.2	969.9	949.1	943.3	942.1
10°	964.1	957.2	927.1	915.6	912.1
12.5°	953.7	941.0	902.8	886.7	879.7
15°	939.8	919.0	875.1	853.1	843.9
17.5°	919.0	892.4	846.2	818.5	808.0
20°	899.4	863.5	813.8	779.1	769.9
22.5°	871.6	833.5	776.8	739.8	728.3
25°	845.0	800.0	738.7	699.4	686.7
27.5°	816.1	765.3	699.4	657.8	641.6
30°	782.6	728.3	660.1	616.2	598.8
32.5°	750.2	692.4	619.6	571.1	552.6
35°	716.7	652.0	579.2	527.1	508.6
37.5°	682.0	613.8	534.1	483.2	458.9
40°	647.4	575.7	493.6	435.8	415.0
42.5°	611.5	536.4	452.0	391.9	365.3
45°	571.1	497.1	409.2	345.6	320.2
47.5°	531.8	458.9	369.9	300.6	277.4
50°	490.1	418.5	328.3	261.3	246.2
52.5°	448.5	376.9	287.8	231.2	224.3
55°	406.9	338.7	248.5	209.2	203.5
57.5°	360.7	299.4	213.9	189.6	185.0
60°	314.4	256.6	183.8	171.1	167.6
62.5°	269.3	219.6	163.0	152.6	150.3
65°	226.6	182.6	143.3	135.3	134.1
67.5°	185.0	150.3	124.8	120.2	117.9
70°	143.3	120.2	107.5	105.2	102.9
72.5°	106.4	97.1	91.3	90.2	89.0
75°	74.0	77.5	75.1	75.1	75.1
77.5°	59.0	60.1	61.3	62.4	61.3
80°	42.8	46.2	47.4	49.7	48.6
82.5°	30.1	32.4	35.8	37.0	38.1
85°	18.5	19.7	23.1	25.4	25.4
87.5°	8.1	9.2	11.6	13.9	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)