

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: P1060230

Luminaire Tested: S124RDR-S1020D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060230
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-S1020D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

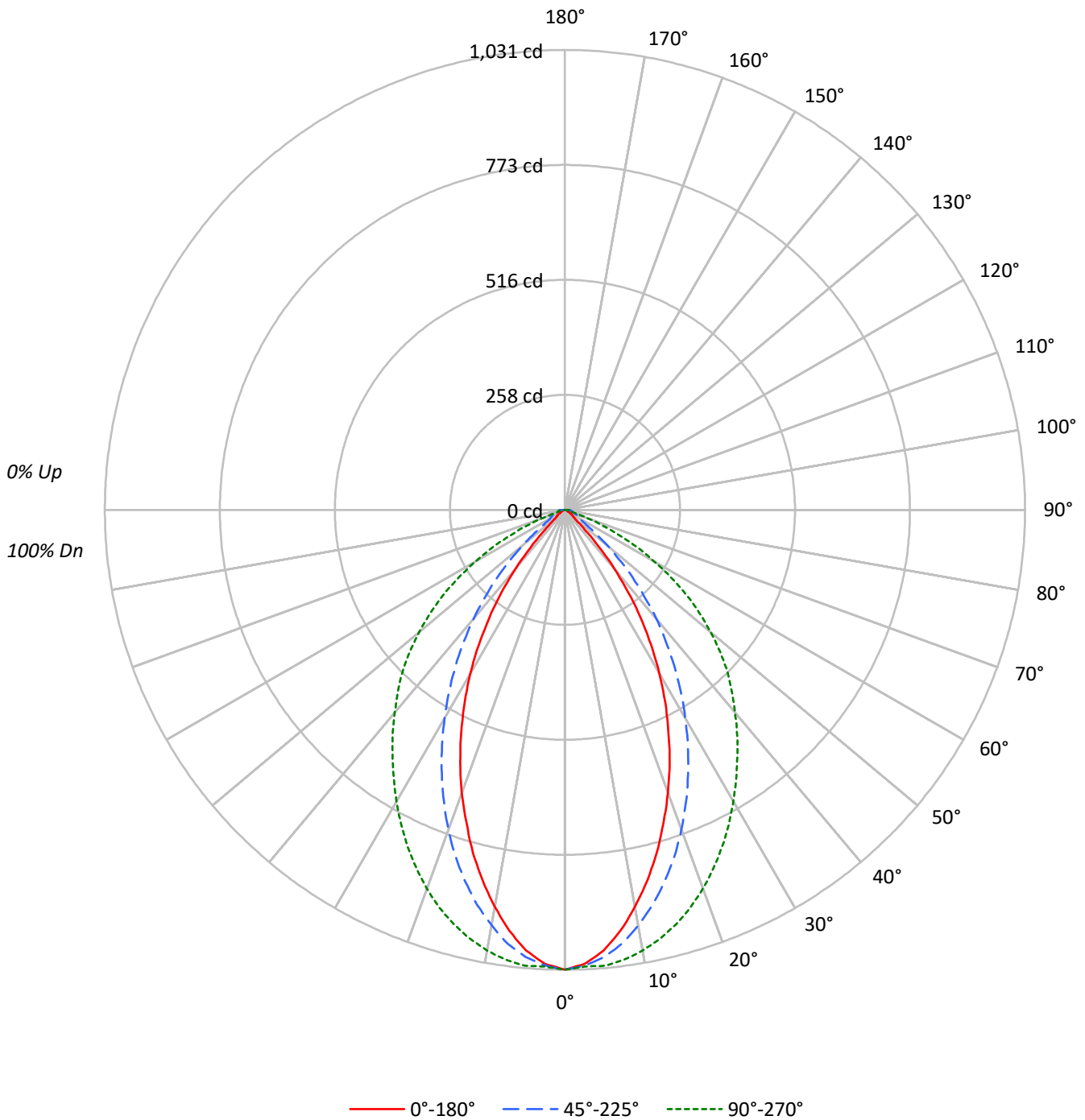
Lumens per Lamp: N/A
Luminaire Lumens: 1299.0 lumens
Efficiency: N/A
Efficacy: 37.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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°	8875	8875	8875
5°	8575	8700	8868
10°	7902	8272	8769
15°	7096	7689	8573
20°	6186	6995	8281
25°	5218	6207	7919
30°	4210	5364	7506
35°	3116	4489	7083
40°	1931	3577	6664
45°	766	2607	6275
50°	340	1637	5704
55°	272	854	4995
60°	188	646	3980
65°	122	642	2736
70°	121	579	1279
75°	160	562	562
80°	238	660	660
85°	474	1314	958

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6275 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	7.3
10°-20°	244.0	18.8
20°-30°	308.0	23.7
30°-40°	282.6	21.8
40°-50°	192.5	14.8
50°-60°	104.8	8.1
60°-70°	45.4	3.5
70°-80°	16.5	1.3
80°-90°	10.7	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°	646.6	49.8
0°-40°	929.1	71.5
0°-60°	1226.5	94.4
0°-90°	1299.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1299.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1031	1031	1031	1031	1031	
5°	992	1005	1006	1017	1026	92
15°	796	824	862	924	962	221
25°	549	588	653	757	834	251
35°	296	340	427	562	674	183
45°	63	105	214	380	515	58
55°	18	19	57	209	333	16
65°	6	8	32	65	134	7
75°	5	16	17	17	17	5
85°	5	11	13	13	10	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1030.7	1030.7	1030.7	1030.7	1030.7
2.5°	1018.6	1030.7	1022.2	1024.6	1024.6
5°	992.0	1005.3	1006.5	1017.4	1025.9
7.5°	952.1	971.4	981.1	1002.9	1017.4
10°	903.7	926.7	946.0	983.5	1002.9
12.5°	851.7	878.3	907.3	956.9	984.7
15°	796.0	823.8	862.5	924.2	961.7
17.5°	734.3	768.2	815.4	889.2	935.1
20°	675.0	708.9	763.3	846.8	903.7
22.5°	613.3	648.4	708.9	802.1	869.8
25°	549.2	587.9	653.3	757.3	833.5
27.5°	486.3	527.4	596.4	710.1	794.8
30°	423.4	464.5	539.5	661.7	754.9
32.5°	359.3	401.6	482.7	610.9	713.7
35°	296.4	339.9	427.0	562.5	673.8
37.5°	232.3	278.2	371.4	515.3	633.9
40°	171.8	217.8	318.2	468.2	592.8
42.5°	114.9	160.9	263.7	422.2	554.1
45°	62.9	105.2	214.1	379.9	515.3
47.5°	33.9	58.1	165.7	338.7	471.8
50°	25.4	31.5	122.2	295.2	425.8
52.5°	21.8	24.2	84.7	249.2	379.9
55°	18.1	19.4	56.9	209.3	332.7
57.5°	14.5	15.7	42.3	169.4	281.9
60°	10.9	13.3	37.5	130.7	231.1
62.5°	8.5	10.9	35.1	95.6	182.7
65°	6.0	8.5	31.5	65.3	134.3
67.5°	6.0	9.7	26.6	42.3	90.7
70°	4.8	13.3	23.0	27.8	50.8
72.5°	4.8	14.5	19.4	19.4	19.4
75°	4.8	15.7	16.9	16.9	16.9
77.5°	4.8	14.5	15.7	14.5	14.5
80°	4.8	13.3	13.3	13.3	13.3
82.5°	4.8	12.1	13.3	13.3	10.9
85°	4.8	10.9	13.3	13.3	9.7
87.5°	3.6	10.9	12.1	12.1	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)