

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: P1060563

Luminaire Tested: S124RDR-S795D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060563
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-S795D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

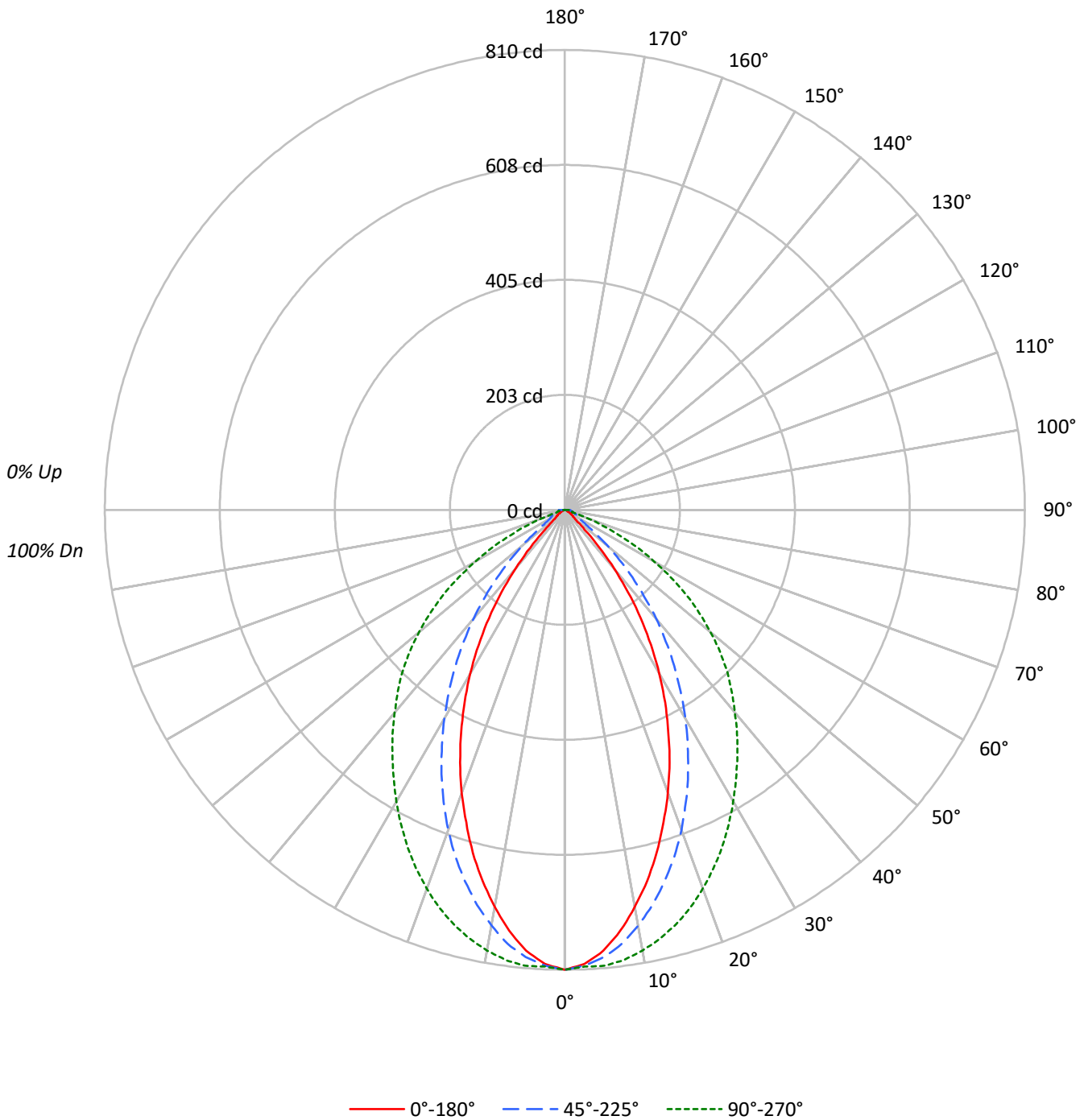
Lumens per Lamp: N/A
Luminaire Lumens: 1020.9 lumens
Efficiency: N/A
Efficacy: 39.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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

TEST NUMBER: P1060563

CATALOG NUMBER: S124RDR-S795D840-X4F0-XX-UDD-BVL-W

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	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°	6975	6975	6975
5°	6738	6837	6969
10°	6209	6500	6891
15°	5576	6043	6738
20°	4861	5497	6507
25°	4101	4878	6223
30°	3308	4216	5898
35°	2448	3528	5566
40°	1518	2810	5236
45°	602	2050	4932
50°	268	1286	4482
55°	215	671	3924
60°	148	508	3128
65°	98	503	2150
70°	96	456	1005
75°	126	443	443
80°	188	521	521
85°	375	1037	751

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4932 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	7.3
10°-20°	191.8	18.8
20°-30°	242.1	23.7
30°-40°	222.1	21.8
40°-50°	151.2	14.8
50°-60°	82.4	8.1
60°-70°	35.7	3.5
70°-80°	13.0	1.3
80°-90°	8.4	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°	508.1	49.8
0°-40°	730.2	71.5
0°-60°	963.8	94.4
0°-90°	1020.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1020.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	780	790	791	800	806	72
15°	626	647	678	726	756	174
25°	432	462	513	595	655	197
35°	233	267	336	442	530	144
45°	49	83	168	298	405	46
55°	14	15	45	164	261	13
65°	5	7	25	51	106	6
75°	4	12	13	13	13	4
85°	4	9	10	10	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	810.0	810.0	810.0	810.0	810.0
2.5°	800.5	810.0	803.3	805.2	805.2
5°	779.5	790.0	791.0	799.5	806.2
7.5°	748.2	763.4	771.0	788.1	799.5
10°	710.1	728.2	743.4	772.9	788.1
12.5°	669.3	690.2	713.0	752.0	773.8
15°	625.5	647.4	677.8	726.3	755.8
17.5°	577.1	603.7	640.8	698.7	734.9
20°	530.5	557.1	599.9	665.5	710.1
22.5°	482.0	509.6	557.1	630.3	683.5
25°	431.6	462.0	513.4	595.1	655.0
27.5°	382.2	414.5	468.7	558.0	624.6
30°	332.7	365.1	424.0	520.0	593.2
32.5°	282.3	315.6	379.3	480.1	560.9
35°	232.9	267.1	335.6	442.1	529.5
37.5°	182.5	218.7	291.9	405.0	498.2
40°	135.0	171.1	250.0	367.9	465.8
42.5°	90.3	126.4	207.2	331.8	435.4
45°	49.4	82.7	168.3	298.5	405.0
47.5°	26.6	45.6	130.2	266.2	370.8
50°	20.0	24.7	96.0	232.0	334.6
52.5°	17.1	19.0	66.5	195.8	298.5
55°	14.3	15.2	44.7	164.5	261.4
57.5°	11.4	12.4	33.3	133.1	221.5
60°	8.6	10.5	29.5	102.7	181.6
62.5°	6.7	8.6	27.6	75.1	143.6
65°	4.8	6.7	24.7	51.3	105.5
67.5°	4.8	7.6	20.9	33.3	71.3
70°	3.8	10.5	18.1	21.9	39.9
72.5°	3.8	11.4	15.2	15.2	15.2
75°	3.8	12.4	13.3	13.3	13.3
77.5°	3.8	11.4	12.4	11.4	11.4
80°	3.8	10.5	10.5	10.5	10.5
82.5°	3.8	9.5	10.5	10.5	8.6
85°	3.8	8.6	10.5	10.5	7.6
87.5°	2.9	8.6	9.5	9.5	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)