

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: P1060578

Luminaire Tested: S124RDR-S795D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

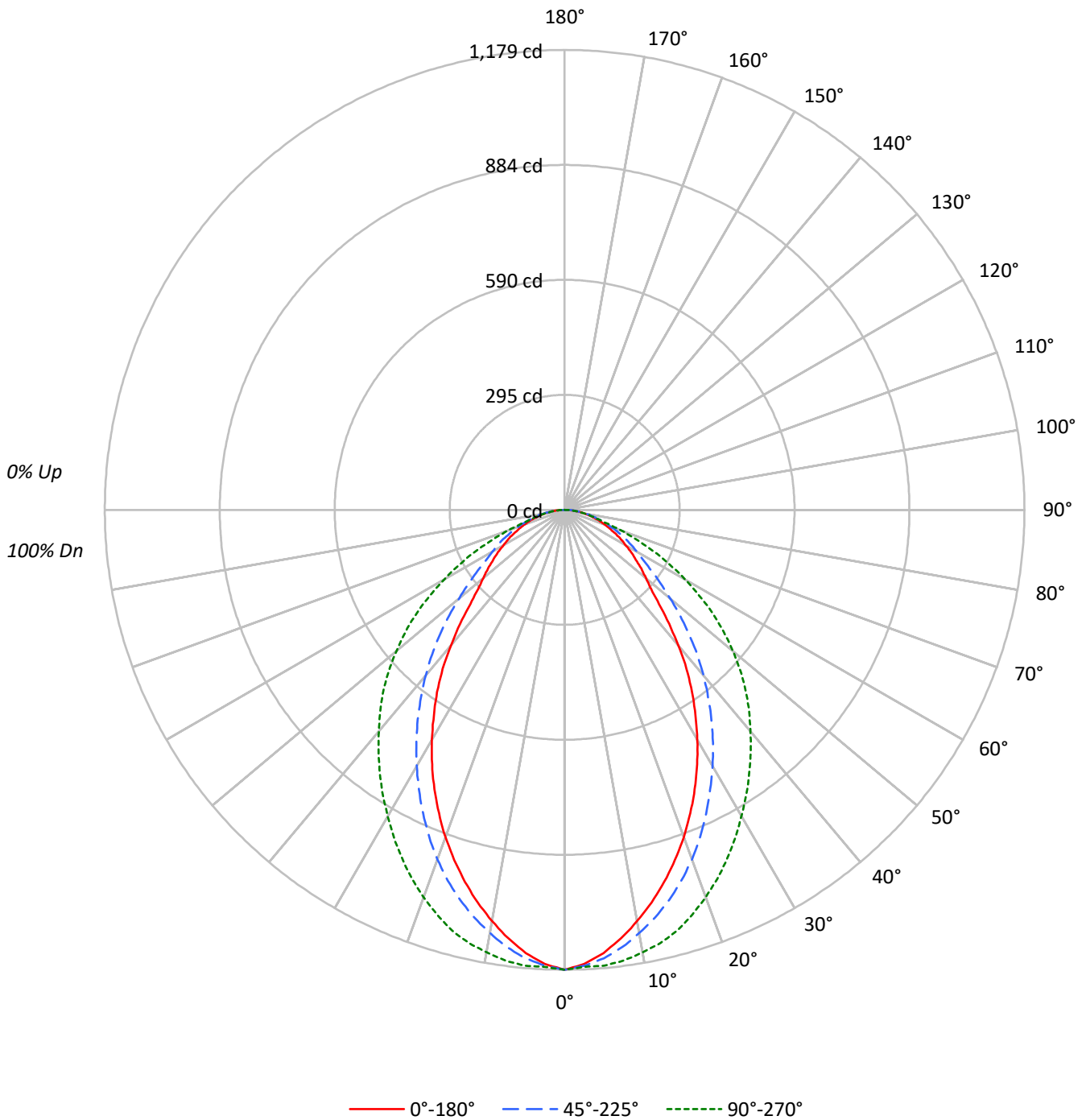
Lumens per Lamp: N/A
Luminaire Lumens: 2163.3 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65	65	65	65	65														
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50	50	50	50	50	50	50														
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40	40	40	40	40	40	40														
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33	33	33	33	33	33	33														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10153	10153	10153
5°	9858	9974	10137
10°	9360	9634	10072
15°	8799	9227	9953
20°	8184	8739	9685
25°	7504	8159	9368
30°	6764	7542	9016
35°	5989	6899	8676
40°	5090	6228	8327
45°	4167	5502	8005
50°	3648	4725	7534
55°	3352	4073	6971
60°	3109	3665	6145
65°	2912	3443	5145
70°	2732	3152	3862
75°	2569	2881	2811
80°	2380	2638	2380
85°	2164	2579	2065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8005 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	5.0
10°-20°	293.2	13.6
20°-30°	400.7	18.5
30°-40°	421.1	19.5
40°-50°	365.5	16.9
50°-60°	275.7	12.7
60°-70°	178.7	8.3
70°-80°	91.7	4.2
80°-90°	27.8	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°	802.8	37.1
0°-40°	1224.0	56.6
0°-60°	1865.1	86.2
0°-90°	2163.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2163.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1140	1156	1154	1163	1173	107
15°	987	1011	1035	1082	1116	277
25°	790	818	859	924	986	362
35°	570	601	656	744	825	354
45°	342	375	452	564	657	269
55°	223	230	271	385	464	201
65°	143	146	169	204	252	142
75°	77	87	87	88	84	82
85°	22	27	26	25	21	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1179.0	1179.0	1179.0	1179.0	1179.0
2.5°	1165.4	1180.0	1169.6	1171.7	1172.7
5°	1140.4	1156.0	1153.9	1163.3	1172.7
7.5°	1108.0	1126.8	1131.0	1149.8	1165.4
10°	1070.5	1091.3	1101.8	1132.0	1151.9
12.5°	1030.8	1051.7	1070.5	1109.1	1137.2
15°	987.0	1011.0	1035.0	1081.9	1116.4
17.5°	941.1	966.1	996.4	1047.5	1088.2
20°	893.1	918.1	953.6	1008.9	1056.9
22.5°	842.0	870.1	907.7	967.2	1023.5
25°	789.8	818.0	858.7	924.4	986.0
27.5°	735.6	764.8	808.6	881.6	947.4
30°	680.3	711.6	758.5	835.7	906.7
32.5°	623.9	657.3	707.4	789.8	867.0
35°	569.7	601.0	656.3	743.9	825.3
37.5°	513.3	544.6	604.1	699.0	783.6
40°	452.8	487.2	554.0	652.1	740.8
42.5°	396.5	430.9	502.9	607.2	700.1
45°	342.2	374.6	451.8	564.4	657.3
47.5°	300.5	323.4	400.6	522.7	611.4
50°	272.3	282.7	352.7	476.8	562.4
52.5°	247.3	255.6	308.8	430.9	514.4
55°	223.3	229.5	271.3	385.0	464.3
57.5°	202.4	205.5	237.9	339.1	410.0
60°	180.5	184.7	212.8	292.1	356.8
62.5°	162.8	164.8	190.9	247.3	303.6
65°	142.9	146.1	169.0	204.5	252.5
67.5°	125.2	130.4	146.1	166.9	199.3
70°	108.5	115.8	125.2	135.6	153.4
72.5°	92.9	101.2	106.4	110.6	107.5
75°	77.2	86.6	86.6	87.6	84.5
77.5°	62.6	70.9	69.9	68.9	64.7
80°	48.0	55.3	53.2	52.2	48.0
82.5°	35.5	40.7	38.6	37.6	32.3
85°	21.9	27.1	26.1	25.0	20.9
87.5°	10.4	15.7	14.6	13.6	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)