

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: P1060470

Luminaire Tested: S124RDR-S575D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060470
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-S575D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

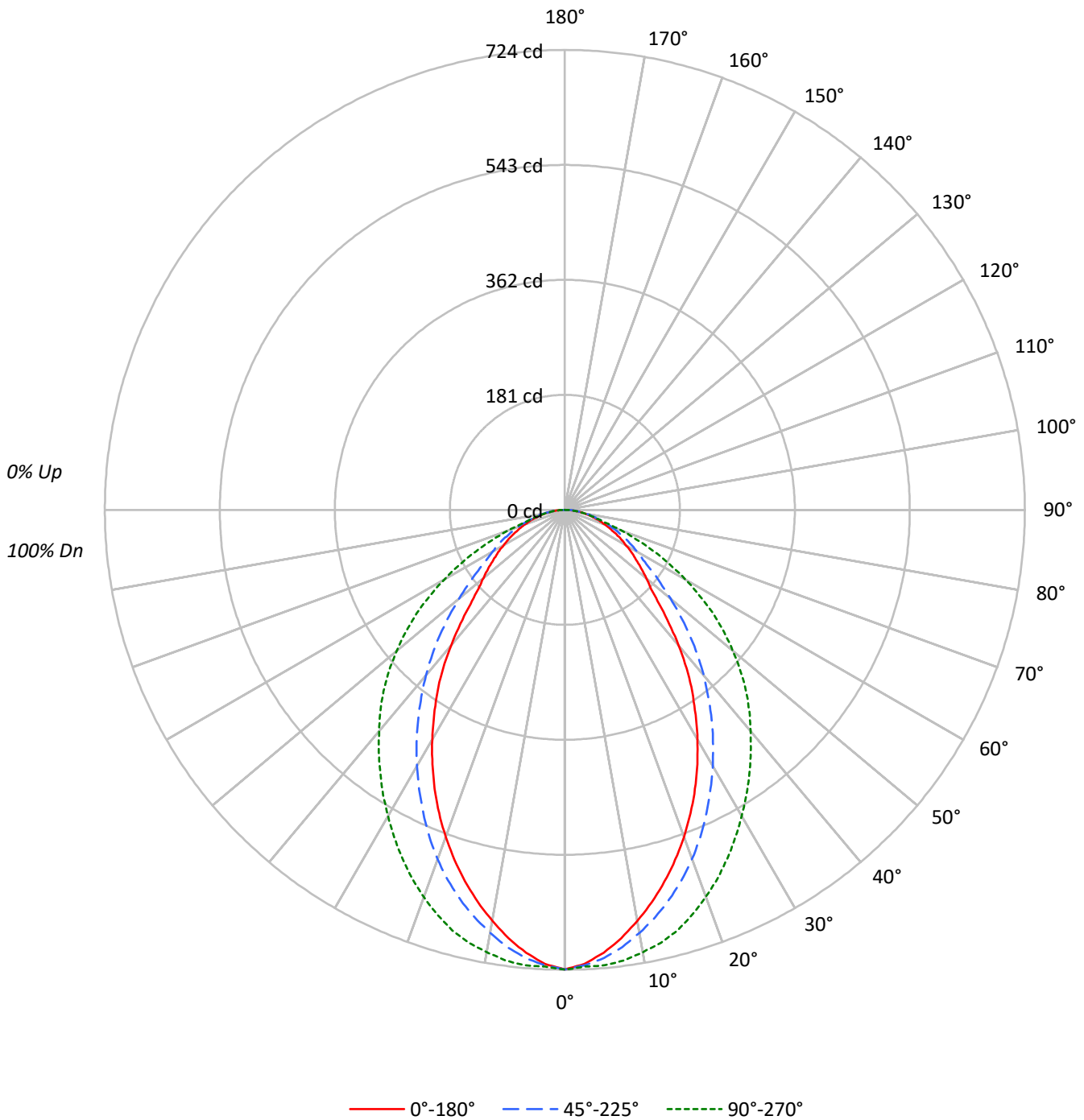
Lumens per Lamp: N/A
Luminaire Lumens: 1327.7 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87						87														
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75						75														
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65						65														
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57						57														
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50						50														
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45						45														
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40						40														
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37						37														
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33						33														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31						31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6231	6231	6231
5°	6050	6122	6222
10°	5745	5913	6182
15°	5401	5663	6108
20°	5023	5364	5945
25°	4605	5007	5749
30°	4151	4629	5533
35°	3675	4234	5324
40°	3124	3822	5111
45°	2557	3377	4913
50°	2239	2899	4624
55°	2057	2500	4279
60°	1908	2249	3772
65°	1787	2113	3158
70°	1677	1934	2369
75°	1577	1767	1727
80°	1463	1622	1463
85°	1324	1581	1265

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4913 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	5.0
10°-20°	179.9	13.6
20°-30°	245.9	18.5
30°-40°	258.5	19.5
40°-50°	224.3	16.9
50°-60°	169.2	12.7
60°-70°	109.7	8.3
70°-80°	56.3	4.2
80°-90°	17.1	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°	492.7	37.1
0°-40°	751.2	56.6
0°-60°	1144.7	86.2
0°-90°	1327.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1327.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	700	710	708	714	720	65
15°	606	620	635	664	685	170
25°	485	502	527	567	605	222
35°	350	369	403	457	506	217
45°	210	230	277	346	403	165
55°	137	141	166	236	285	123
65°	88	90	104	126	155	87
75°	47	53	53	54	52	50
85°	13	17	16	15	13	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	723.6	723.6	723.6	723.6	723.6
2.5°	715.3	724.2	717.8	719.1	719.8
5°	699.9	709.5	708.2	714.0	719.8
7.5°	680.1	691.6	694.1	705.7	715.3
10°	657.0	669.8	676.2	694.8	707.0
12.5°	632.7	645.5	657.0	680.7	698.0
15°	605.8	620.5	635.2	664.0	685.2
17.5°	577.6	593.0	611.5	642.9	667.9
20°	548.1	563.5	585.3	619.2	648.7
22.5°	516.8	534.1	557.1	593.6	628.2
25°	484.7	502.0	527.0	567.4	605.1
27.5°	451.4	469.4	496.3	541.1	581.4
30°	417.5	436.7	465.5	512.9	556.5
32.5°	382.9	403.4	434.2	484.7	532.1
35°	349.6	368.8	402.8	456.6	506.5
37.5°	315.1	334.3	370.8	429.0	480.9
40°	277.9	299.0	340.0	400.2	454.7
42.5°	243.3	264.5	308.7	372.7	429.7
45°	210.0	229.9	277.3	346.4	403.4
47.5°	184.4	198.5	245.9	320.8	375.2
50°	167.1	173.5	216.4	292.6	345.2
52.5°	151.8	156.9	189.5	264.5	315.7
55°	137.0	140.9	166.5	236.3	285.0
57.5°	124.2	126.1	146.0	208.1	251.7
60°	110.8	113.3	130.6	179.3	219.0
62.5°	99.9	101.2	117.2	151.8	186.3
65°	87.7	89.6	103.7	125.5	155.0
67.5°	76.8	80.0	89.6	102.5	122.3
70°	66.6	71.1	76.8	83.2	94.1
72.5°	57.0	62.1	65.3	67.9	66.0
75°	47.4	53.1	53.1	53.8	51.9
77.5°	38.4	43.5	42.9	42.3	39.7
80°	29.5	33.9	32.7	32.0	29.5
82.5°	21.8	25.0	23.7	23.1	19.9
85°	13.4	16.6	16.0	15.4	12.8
87.5°	6.4	9.6	9.0	8.3	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)