

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: P1025620

Luminaire Tested: S124DIP-B575D590UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025620
REPORT IS A COMBINATION OF REPORTS P996205 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B575D590UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

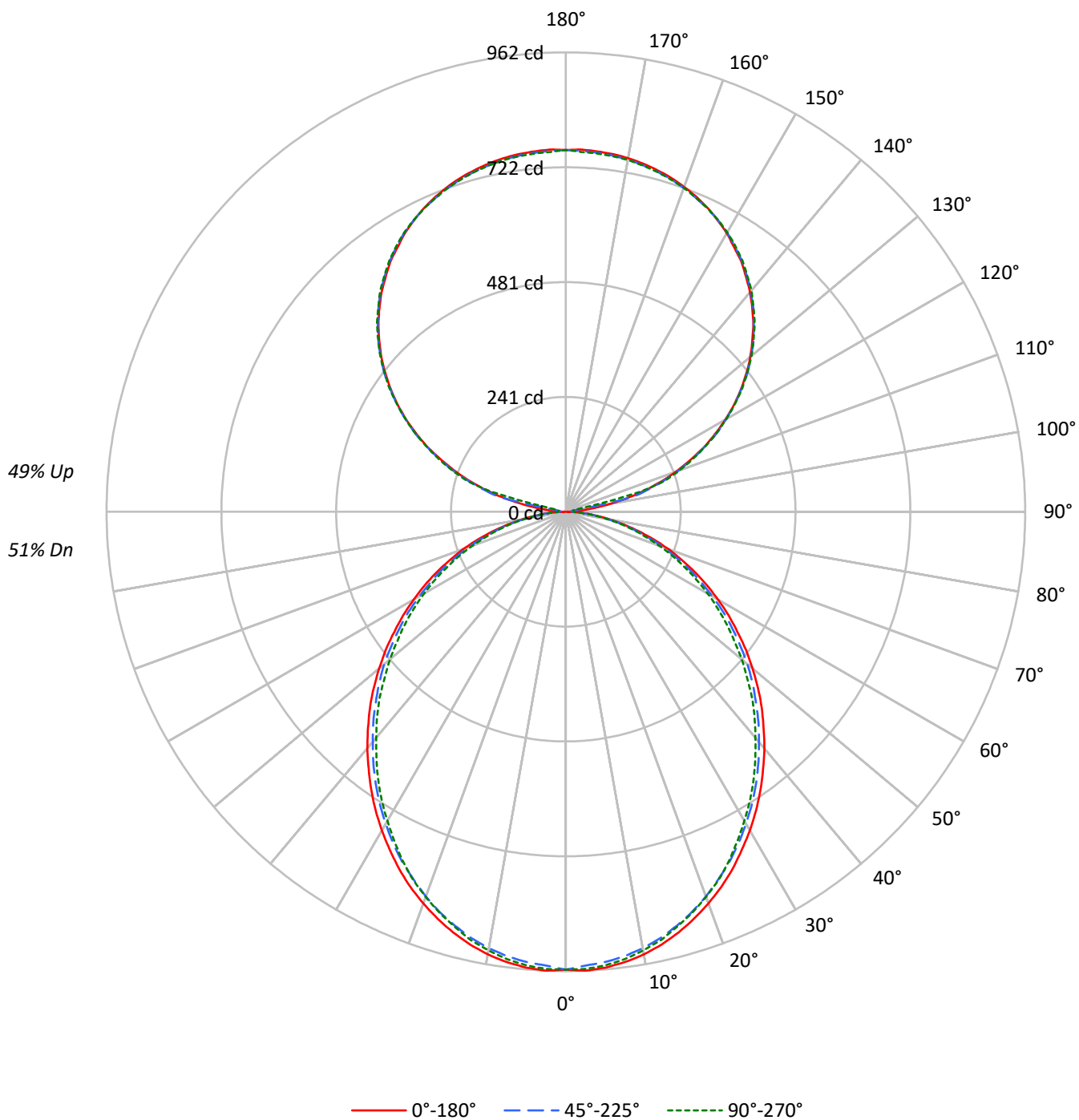
Lumens per Lamp: N/A
Luminaire Lumens: 4807.0 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 39.4
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	49	48
2	89	82	76	70	82	76	70	66	64	61	57	54	51	49	44	42	41
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	39	37	35
4	74	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30
5	68	57	49	43	63	53	45	40	45	40	35	38	34	31	32	29	26
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	25	23
7	58	46	38	32	54	43	36	31	37	31	27	31	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	31	25	46	36	29	24	31	25	22	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7819	7819	7819
5°	7826	7594	7603
10°	7759	7383	7331
15°	7648	7133	7025
20°	7506	6861	6708
25°	7345	6575	6366
30°	7153	6265	5990
35°	6953	5948	5628
40°	6745	5607	5242
45°	6527	5265	4882
50°	6284	4933	4482
55°	6022	4545	4086
60°	5753	4121	3673
65°	5445	3683	3208
70°	5091	3156	2709
75°	4562	2543	2169
80°	3887	1839	1527
85°	3020	1025	822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6527 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	1.9
10°-20°	254.6	5.3
20°-30°	374.7	7.8
30°-40°	435.6	9.1
40°-50°	435.5	9.1
50°-60°	380.9	7.9
60°-70°	282.8	5.9
70°-80°	160.5	3.3
80°-90°	47.5	1.0
90°-100°	25.2	0.5
100°-110°	165.6	3.4
110°-120°	316.3	6.6
120°-130°	401.5	8.4
130°-140°	429.5	8.9
140°-150°	401.6	8.4
150°-160°	323.9	6.7
160°-170°	208.9	4.3
170°-180°	72.0	1.5
0°-30°	719.7	15.0
0°-40°	1155.3	24.0
0°-60°	1971.8	41.0
0°-90°	2462.6	51.2
90°-120°	507.0	10.5
90°-150°	1739.7	36.2
90°-180°	2344.0	48.8
0°-180°	4807.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	958	955	946	955	953	91
15°	912	909	897	902	900	257
25°	826	820	810	810	808	380
35°	711	705	694	689	685	444
45°	580	575	562	554	552	447
55°	439	436	426	416	412	393
65°	297	294	286	278	274	294
75°	158	154	151	148	147	168
85°	42	42	40	40	39	45
90°	2	8	12	16	17	4
95°	31	12	12	16	16	38
105°	171	174	177	182	162	179
115°	318	320	320	321	321	313
125°	448	450	449	450	451	400
135°	555	555	557	558	559	428
145°	640	642	642	643	644	400
155°	702	703	701	703	702	324
165°	741	738	738	742	737	209
175°	758	754	755	760	753	72
180°	758	758	758	758	758	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.8	958.8	958.8	958.8	958.8
2.5°	961.9	959.6	951.1	958.8	958.1
5°	958.1	955.0	946.5	955.0	953.4
7.5°	951.1	948.1	938.8	945.8	945.0
10°	941.2	938.1	928.1	934.2	932.7
12.5°	928.1	925.0	914.3	921.2	918.9
15°	912.0	908.9	897.4	902.0	899.7
17.5°	893.5	889.7	878.9	882.0	880.5
20°	872.8	868.9	857.4	859.7	858.2
22.5°	850.5	845.1	833.6	838.2	835.1
25°	825.9	820.5	809.8	810.5	807.5
27.5°	798.2	792.9	782.9	781.3	777.5
30°	770.6	764.4	754.5	751.4	747.5
32.5°	741.4	736.0	725.3	721.4	717.6
35°	710.7	705.3	694.5	689.2	685.3
37.5°	678.4	673.8	662.3	656.9	651.5
40°	646.9	640.8	629.2	621.5	617.7
42.5°	613.1	610.0	597.0	587.7	585.4
45°	580.1	574.7	562.4	553.9	551.6
47.5°	545.5	541.6	530.1	520.9	514.8
50°	510.1	507.1	496.3	485.6	480.9
52.5°	475.6	471.7	460.2	451.0	444.8
55°	438.7	436.4	425.6	416.4	411.8
57.5°	404.1	401.8	391.1	381.8	377.2
60°	368.0	364.2	354.2	347.3	343.4
62.5°	332.7	329.6	318.8	312.7	308.9
65°	297.3	293.5	285.8	278.1	274.3
67.5°	261.2	258.1	250.5	242.8	242.0
70°	228.2	222.8	216.7	210.5	208.2
72.5°	192.8	187.5	182.9	178.2	175.9
75°	158.3	154.4	150.6	147.5	146.7
77.5°	124.5	122.9	119.1	118.3	116.0
80°	94.5	92.2	90.7	89.1	88.4
82.5°	65.3	64.5	64.5	63.8	63.0
85°	41.5	41.5	40.0	40.0	39.2
87.5°	20.0	19.2	18.4	18.4	18.4
90°	1.7	7.9	12.5	15.9	17.0
92.5°	8.5	7.4	11.9	15.3	15.3
95°	31.2	11.9	12.5	15.9	16.4
97.5°	59.5	72.0	12.5	15.3	15.9
100°	92.9	103.1	24.9	15.3	15.9
102.5°	130.3	137.1	143.9	16.4	16.4
105°	170.6	174.0	176.8	181.9	161.5
107.5°	207.4	209.1	213.1	215.9	218.2
110°	244.8	246.5	249.9	251.0	252.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.1	284.5	285.6	285.0	287.3
115°	318.5	320.2	319.6	320.7	320.7
117.5°	351.9	354.2	355.9	355.3	355.3
120°	385.9	388.2	387.6	388.7	387.6
122.5°	417.6	418.8	419.9	420.5	419.3
125°	447.7	449.9	448.8	450.5	451.1
127.5°	476.6	477.1	480.0	479.4	478.8
130°	504.3	504.9	506.6	507.2	507.2
132.5°	529.8	531.0	533.2	533.8	533.2
135°	555.3	554.8	557.0	558.2	559.3
137.5°	578.0	578.0	580.8	582.0	581.4
140°	600.1	601.2	602.4	604.1	604.6
142.5°	619.9	622.2	622.8	623.9	623.9
145°	640.3	642.0	642.0	642.6	643.7
147.5°	656.2	659.6	659.0	659.6	660.2
150°	673.8	676.0	675.5	675.5	676.0
152.5°	688.5	690.2	689.1	690.2	689.6
155°	702.1	702.7	701.0	703.2	701.5
157.5°	714.0	714.0	711.7	714.6	711.7
160°	724.2	722.5	721.9	725.3	721.9
162.5°	733.3	731.0	730.4	733.8	729.9
165°	740.6	737.8	737.8	742.3	737.2
167.5°	746.9	744.0	743.5	748.6	742.9
170°	752.0	748.6	749.1	753.7	748.0
172.5°	755.4	752.0	752.5	757.1	750.8
175°	757.6	754.2	754.8	759.9	753.1
177.5°	759.3	755.4	756.5	761.0	754.2
180°	757.6	757.6	757.6	757.6	757.6

(END OF REPORT)