

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: P1025648

Luminaire Tested: S124DIP-B575D590UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025648
REPORT IS A COMBINATION OF REPORTS P996248 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B575D590UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

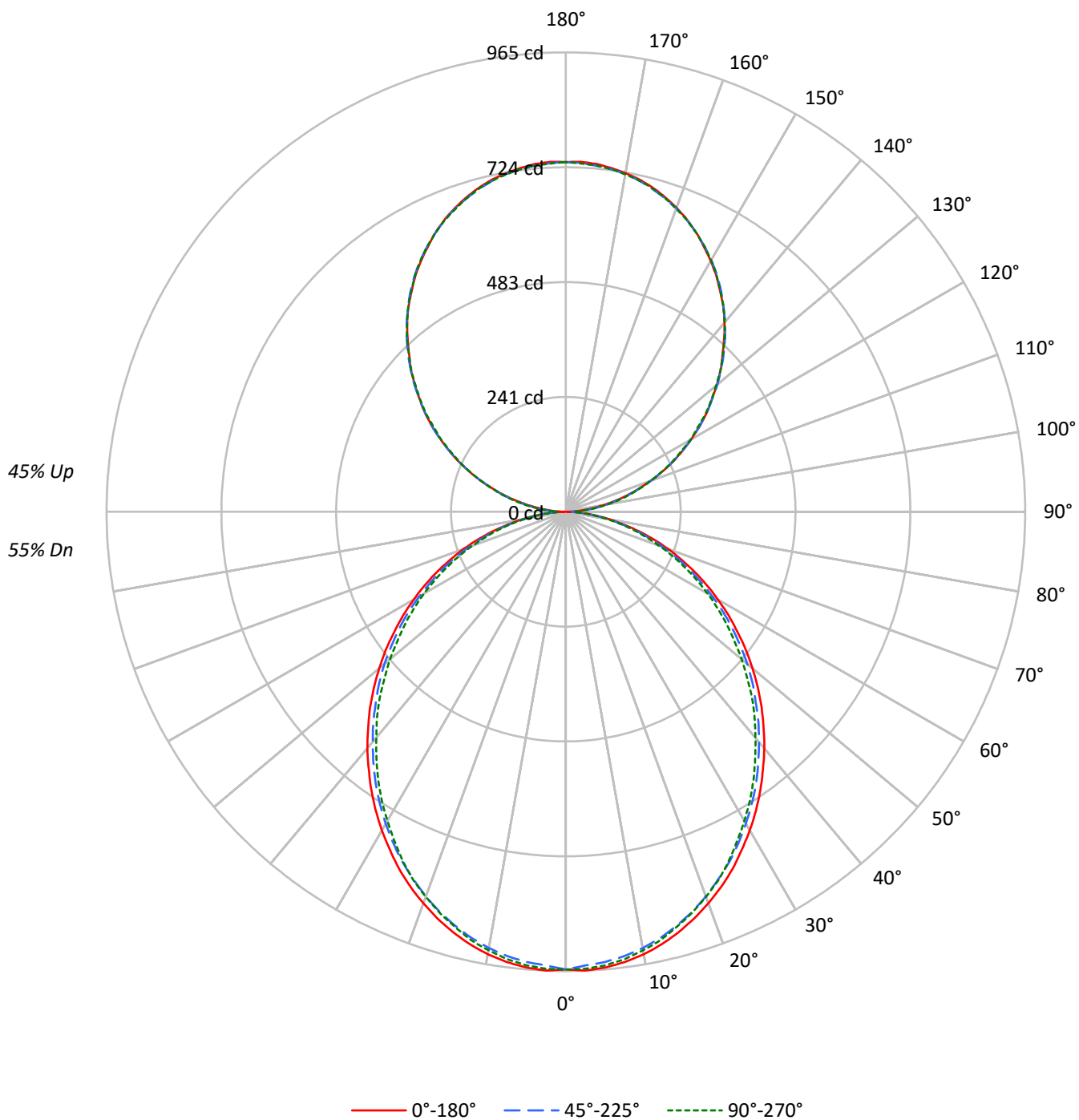
Lumens per Lamp: N/A
Luminaire Lumens: 4508.0 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	53	52	51
2	90	82	76	71	83	77	71	67	66	62	58	56	53	51	47	45	43
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	34	30	27
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22
8	55	42	34	29	51	40	32	28	35	29	25	30	25	22	26	22	19
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17
10	48	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7841	7841	7841
5°	7848	7615	7625
10°	7781	7404	7353
15°	7669	7153	7045
20°	7527	6880	6726
25°	7367	6594	6384
30°	7173	6283	6008
35°	6973	5965	5644
40°	6763	5623	5258
45°	6545	5280	4896
50°	6302	4947	4495
55°	6038	4558	4098
60°	5770	4133	3683
65°	5461	3693	3217
70°	5104	3164	2717
75°	4573	2550	2176
80°	3899	1844	1530
85°	3027	1028	824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6545 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	2.0
10°-20°	255.3	5.7
20°-30°	375.8	8.3
30°-40°	436.8	9.7
40°-50°	436.8	9.7
50°-60°	382.0	8.5
60°-70°	283.6	6.3
70°-80°	160.9	3.6
80°-90°	47.7	1.1
90°-100°	47.9	1.1
100°-110°	143.4	3.2
110°-120°	243.7	5.4
120°-130°	321.4	7.1
130°-140°	360.9	8.0
140°-150°	354.8	7.9
150°-160°	298.4	6.6
160°-170°	198.5	4.4
170°-180°	69.5	1.5
0°-30°	721.7	16.0
0°-40°	1158.6	25.7
0°-60°	1977.4	43.9
0°-90°	2469.6	54.8
90°-120°	435.0	9.6
90°-150°	1472.0	32.7
90°-180°	2038.0	45.2
0°-180°	4508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	961	958	949	958	956	91
15°	914	912	900	904	902	258
25°	828	823	812	813	810	381
35°	713	707	696	691	687	446
45°	582	576	564	556	553	448
55°	440	438	427	418	413	394
65°	298	294	287	279	275	295
75°	159	155	151	148	147	168
85°	42	42	40	40	39	45
90°	2	8	12	16	17	5
95°	34	39	43	45	45	37
105°	132	133	135	137	139	140
115°	248	248	247	246	246	244
125°	361	361	360	359	358	322
135°	465	469	469	468	466	360
145°	565	568	568	568	566	354
155°	648	648	647	649	647	298
165°	705	703	702	706	703	199
175°	734	731	730	734	730	70
180°	735	735	735	735	735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.5	961.5	961.5	961.5	961.5
2.5°	964.6	962.3	953.8	961.5	960.8
5°	960.8	957.7	949.2	957.7	956.2
7.5°	953.8	950.8	941.5	948.4	947.7
10°	943.8	940.7	930.7	936.9	935.4
12.5°	930.7	927.6	916.9	923.8	921.5
15°	914.5	911.5	899.9	904.5	902.2
17.5°	896.1	892.2	881.4	884.5	883.0
20°	875.3	871.4	859.8	862.2	860.6
22.5°	852.9	847.5	836.0	840.6	837.5
25°	828.3	822.9	812.1	812.8	809.8
27.5°	800.5	795.1	785.1	783.6	779.7
30°	772.8	766.6	756.6	753.5	749.7
32.5°	743.5	738.1	727.3	723.5	719.6
35°	712.7	707.3	696.5	691.1	687.3
37.5°	680.3	675.7	664.1	658.8	653.4
40°	648.7	642.6	631.0	623.3	619.5
42.5°	614.8	611.8	598.7	589.4	587.1
45°	581.7	576.3	564.0	555.5	553.2
47.5°	547.0	543.2	531.6	522.4	516.2
50°	511.6	508.5	497.7	486.9	482.3
52.5°	476.9	473.1	461.5	452.3	446.1
55°	439.9	437.6	426.8	417.6	413.0
57.5°	405.3	403.0	392.2	382.9	378.3
60°	369.1	365.2	355.2	348.3	344.4
62.5°	333.6	330.5	319.7	313.6	309.7
65°	298.2	294.3	286.6	278.9	275.1
67.5°	262.0	258.9	251.2	243.5	242.7
70°	228.8	223.4	217.3	211.1	208.8
72.5°	193.4	188.0	183.4	178.7	176.4
75°	158.7	154.9	151.0	147.9	147.2
77.5°	124.8	123.3	119.4	118.7	116.3
80°	94.8	92.5	90.9	89.4	88.6
82.5°	65.5	64.7	64.7	63.9	63.2
85°	41.6	41.6	40.1	40.1	39.3
87.5°	20.0	19.3	18.5	18.5	18.5
90°	1.7	8.0	12.5	15.9	17.0
92.5°	14.8	22.2	25.0	26.7	27.3
95°	34.1	39.2	43.2	44.9	44.9
97.5°	54.5	59.1	63.6	65.9	65.9
100°	79.5	81.8	86.9	88.1	88.1
102.5°	105.7	106.3	110.8	112.5	113.1
105°	132.4	133.0	135.2	136.9	138.6
107.5°	160.2	160.8	161.4	163.6	163.1
110°	188.6	189.8	189.2	188.1	189.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.2	218.2	217.0	217.0	217.0
115°	247.7	247.7	246.6	246.0	245.5
117.5°	275.6	275.6	275.0	273.3	271.6
120°	303.4	305.7	304.0	301.1	302.3
122.5°	332.4	333.0	332.4	330.7	327.8
125°	360.8	360.8	360.2	359.1	358.0
127.5°	386.4	388.1	386.9	385.8	385.2
130°	413.6	415.3	415.3	414.2	411.9
132.5°	441.5	442.6	442.0	440.9	440.3
135°	465.3	468.8	468.8	467.6	465.9
137.5°	492.1	493.8	494.9	493.2	493.8
140°	518.8	519.9	519.9	519.3	518.8
142.5°	543.2	544.3	543.8	543.8	543.8
145°	565.3	567.6	568.2	567.6	565.9
147.5°	588.1	590.9	590.3	589.8	589.2
150°	608.5	610.8	610.8	610.8	610.2
152.5°	627.8	629.0	629.6	631.3	629.6
155°	647.7	647.7	647.2	649.4	647.2
157.5°	664.8	663.6	663.6	665.3	663.6
160°	679.6	679.0	678.4	680.1	677.3
162.5°	693.2	691.5	690.9	694.3	691.5
165°	705.1	703.4	702.3	705.7	703.4
167.5°	714.8	712.5	712.5	715.9	712.5
170°	722.7	719.9	720.5	723.9	719.9
172.5°	728.4	726.1	726.1	730.1	726.1
175°	733.5	730.7	730.1	734.1	730.1
177.5°	735.8	733.0	733.0	736.9	732.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)