

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: P1025645

Luminaire Tested: S124DIP-B575D590UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025645
REPORT IS A COMBINATION OF REPORTS P996245 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-D1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

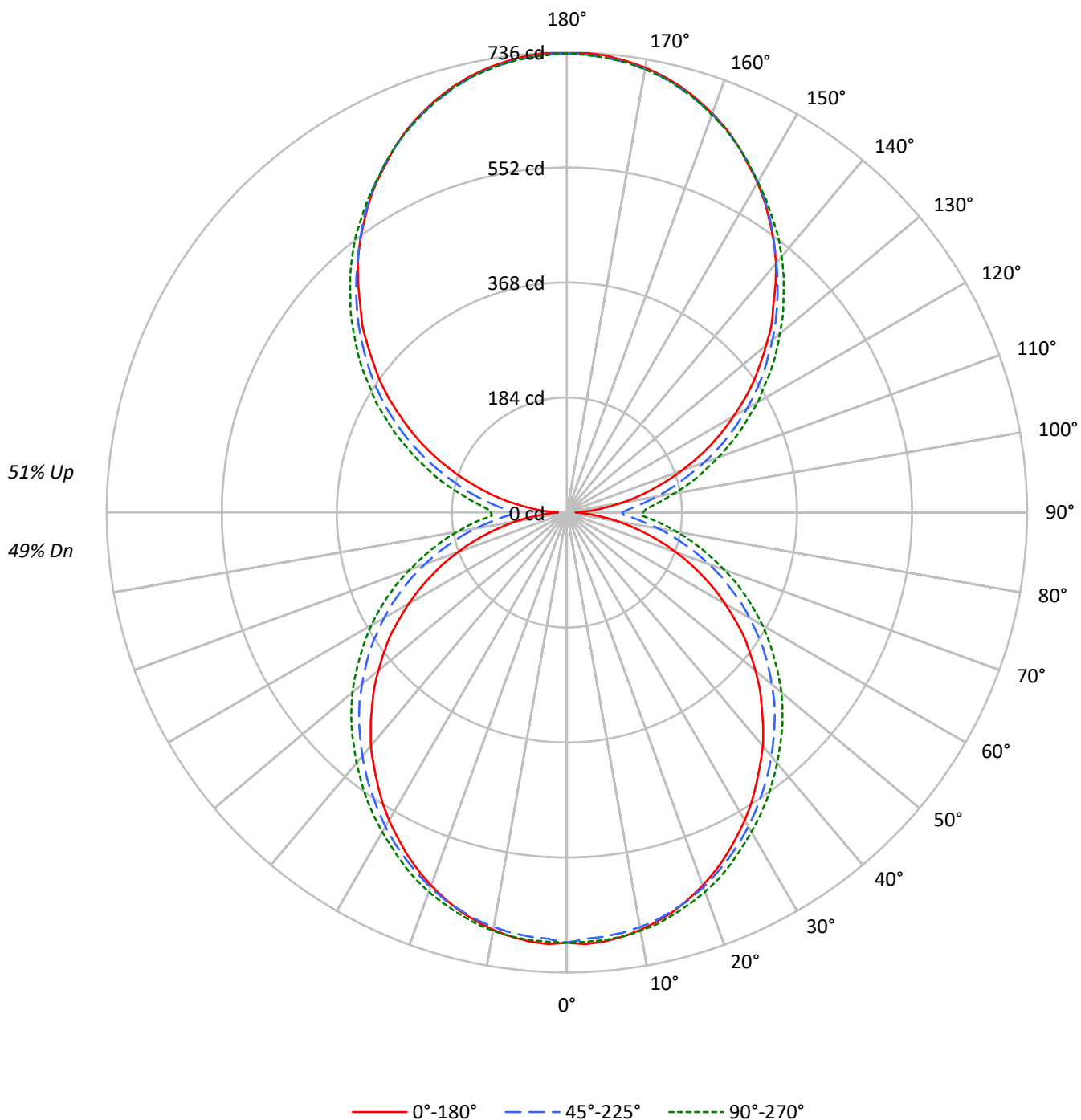
Lumens per Lamp: N/A
Luminaire Lumens: 4386.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	83	83	83	69	69	69	56	56	56
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	48	46	45
2	88	80	73	68	80	73	68	63	62	58	54	51	48	45	41	39	37
3	80	70	62	56	73	64	58	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	67	57	49	44	48	42	38	40	36	32	32	29	26
5	67	55	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	38	32	38	33	28	32	27	24	26	23	20
7	57	44	36	30	52	41	33	28	35	29	25	29	25	21	24	20	18
8	52	40	32	26	48	37	30	25	32	26	22	27	22	19	22	18	16
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	17	14
10	46	33	26	21	42	31	24	20	27	21	17	22	18	15	19	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5611	5611	5611
5°	5627	5465	5475
10°	5590	5358	5342
15°	5538	5236	5192
20°	5460	5105	5047
25°	5373	4961	4890
30°	5279	4818	4730
35°	5172	4672	4587
40°	5086	4532	4440
45°	4959	4400	4310
50°	4850	4251	4173
55°	4738	4106	4014
60°	4565	3927	3865
65°	4375	3733	3686
70°	4143	3512	3479
75°	3818	3266	3281
80°	3455	3016	3075
85°	2969	2765	2907

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4959 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	1.5
10°-20°	186.8	4.3
20°-30°	282.4	6.4
30°-40°	341.7	7.8
40°-50°	361.2	8.2
50°-60°	340.0	7.8
60°-70°	282.1	6.4
70°-80°	198.0	4.5
80°-90°	113.2	2.6
90°-100°	114.3	2.6
100°-110°	192.6	4.4
110°-120°	276.7	6.3
120°-130°	340.0	7.8
130°-140°	369.0	8.4
140°-150°	356.3	8.1
150°-160°	298.4	6.8
160°-170°	198.5	4.5
170°-180°	69.5	1.6
0°-30°	534.4	12.2
0°-40°	876.2	20.0
0°-60°	1577.4	36.0
0°-90°	2170.7	49.5
90°-120°	583.7	13.3
90°-150°	1648.9	37.6
90°-180°	2215.0	50.5
0°-180°	4386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	689	687	681	687	687	65
15°	660	661	659	666	665	186
25°	604	609	611	620	620	278
35°	529	538	546	556	559	331
45°	441	455	470	483	487	341
55°	345	361	384	400	404	308
65°	239	264	290	309	315	237
75°	132	161	193	215	222	141
85°	41	73	108	131	139	43
90°	14	51	89	114	122	11
95°	44	75	110	133	140	45
105°	139	155	186	207	215	148
115°	252	259	283	299	304	249
125°	364	363	382	395	399	325
135°	467	470	476	487	490	361
145°	566	568	568	572	574	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°	688.1	688.1	688.1	688.1	688.1
2.5°	691.2	688.9	682.7	688.1	687.3
5°	688.9	686.6	681.2	687.3	686.6
7.5°	684.2	682.7	678.1	685.0	684.2
10°	678.1	677.3	673.5	680.4	679.6
12.5°	669.6	669.6	667.3	673.5	673.5
15°	660.4	661.1	658.8	665.7	665.0
17.5°	648.0	650.3	649.6	656.5	655.7
20°	634.9	637.2	638.0	645.7	645.7
22.5°	620.3	623.4	624.9	632.6	634.2
25°	604.1	608.7	611.0	619.5	620.3
27.5°	586.4	593.3	596.4	604.1	604.9
30°	568.7	574.8	580.2	588.7	590.2
32.5°	549.4	557.1	563.3	573.3	574.8
35°	528.6	537.8	545.5	556.3	558.6
37.5°	507.8	518.6	527.8	538.6	540.9
40°	487.8	497.8	508.6	520.1	523.2
42.5°	464.6	476.2	489.3	502.4	504.7
45°	440.8	455.4	470.0	483.1	487.0
47.5°	418.4	433.0	450.0	463.1	467.7
50°	393.7	410.7	427.7	443.1	447.7
52.5°	369.1	386.0	406.1	421.5	426.1
55°	345.2	361.4	384.5	399.9	404.5
57.5°	318.2	338.3	360.6	379.1	383.0
60°	292.0	312.1	337.5	355.2	361.4
62.5°	266.6	289.0	314.4	332.1	338.3
65°	238.9	263.5	289.7	309.0	315.2
67.5°	212.7	238.9	266.6	285.9	292.0
70°	185.7	211.9	241.2	262.0	267.4
72.5°	159.5	186.5	218.1	238.1	244.3
75°	132.5	161.0	193.4	215.0	221.9
77.5°	107.1	137.2	171.1	192.6	200.3
80°	84.0	114.8	148.7	171.8	178.0
82.5°	60.9	93.2	127.1	151.0	158.0
85°	40.8	73.2	107.9	131.0	138.7
87.5°	25.4	57.0	90.9	113.3	120.2
90°	14.0	51.2	88.8	114.5	121.8
92.5°	26.4	60.7	96.7	119.9	126.7
95°	44.1	74.6	110.2	132.7	139.7
97.5°	63.7	90.7	126.8	149.1	156.1
100°	88.0	110.3	145.5	167.5	172.9
102.5°	114.2	131.7	165.5	187.2	194.0
105°	139.3	155.3	186.1	207.0	214.9
107.5°	167.1	180.8	208.4	229.9	234.8
110°	194.8	206.8	233.1	249.7	257.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.6	232.8	257.1	274.0	280.2
115°	252.3	259.3	282.8	299.2	304.1
117.5°	280.2	284.8	307.4	321.8	326.3
120°	307.3	311.9	332.5	345.0	352.4
122.5°	336.3	336.9	357.1	370.8	373.3
125°	363.9	363.1	381.8	395.3	398.8
127.5°	389.5	390.4	404.6	417.4	422.2
130°	415.9	416.8	429.2	441.9	444.3
132.5°	443.8	444.1	452.8	464.8	468.8
135°	466.8	470.3	475.7	486.9	489.8
137.5°	493.6	494.6	498.8	508.6	513.1
140°	520.3	520.7	521.4	530.9	534.2
142.5°	544.0	545.1	543.8	552.3	555.4
145°	566.1	567.6	568.2	572.2	573.6
147.5°	588.9	590.9	590.3	590.6	593.1
150°	609.3	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)