

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: P1025646

Luminaire Tested: S124DIP-B575D590UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025646
REPORT IS A COMBINATION OF REPORTS P996246 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-D4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

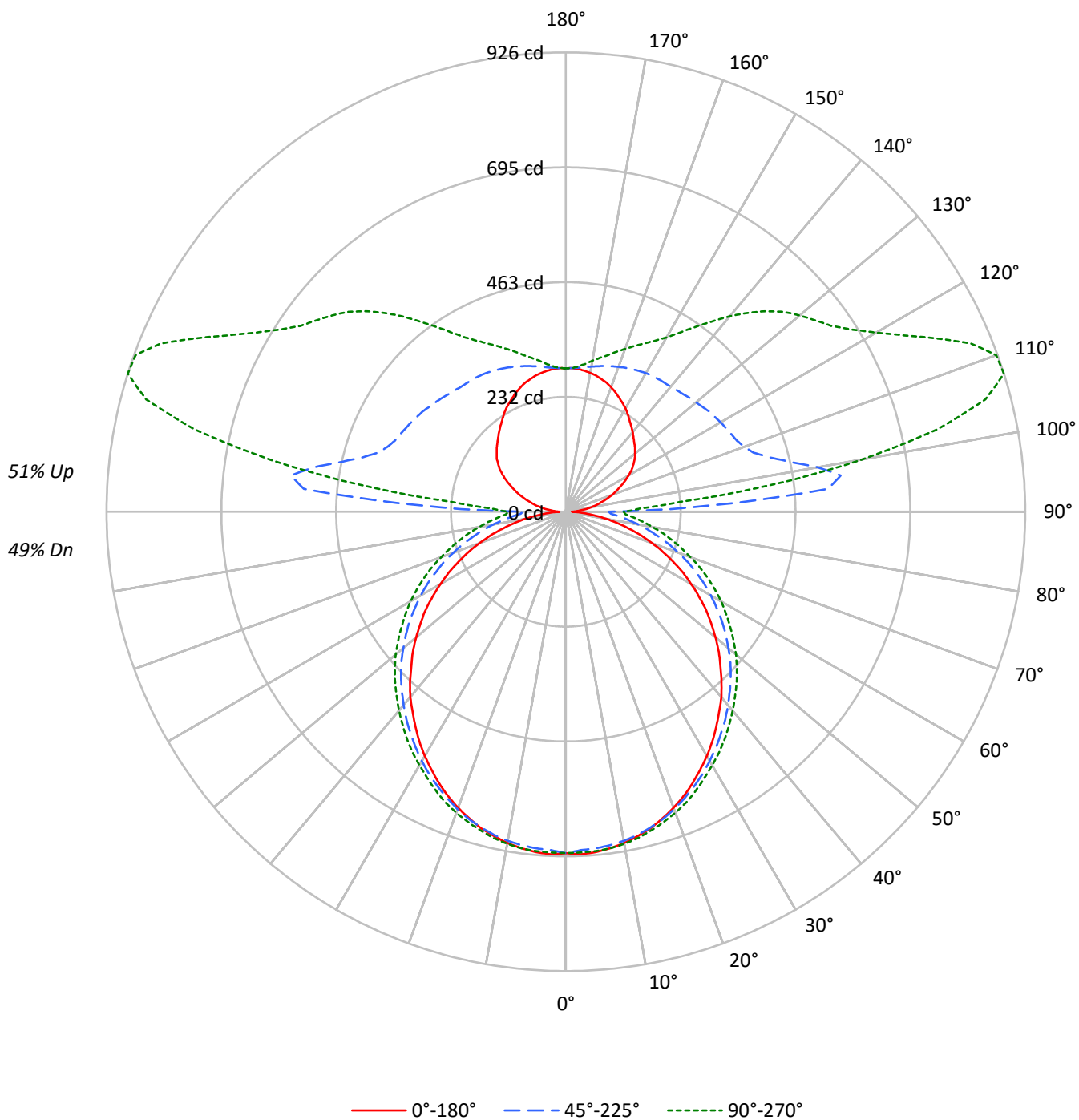
Lumens per Lamp: N/A
Luminaire Lumens: 4458.2 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1025646

CATALOG NUMBER: S124DIP-B575D590UB40-4F0-XX-W2A-D4

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	98	98	98	98	83	83	83	68	68	68	55	55	55
1	97	92	88	84	89	85	81	78	71	68	66	58	57	55	47	46	44
2	87	80	73	67	80	73	68	63	62	57	54	51	48	45	41	39	37
3	80	70	62	56	73	64	57	52	54	49	45	45	41	38	36	33	31
4	73	61	53	47	66	57	49	44	48	42	38	39	35	32	32	29	26
5	66	54	46	40	61	50	43	37	43	37	32	35	31	27	28	25	23
6	61	49	40	34	56	45	38	32	38	32	28	32	27	24	26	22	20
7	56	44	36	30	52	41	33	28	35	29	25	29	24	21	23	20	17
8	52	40	32	26	48	37	30	25	31	26	22	26	22	19	21	18	16
9	49	36	29	23	45	34	27	22	29	23	19	24	20	17	20	16	14
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	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

TEST NUMBER: P1025646

CATALOG NUMBER: S124DIP-B575D590UB40-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	1.5
10°-20°	186.8	4.2
20°-30°	282.4	6.3
30°-40°	341.7	7.7
40°-50°	361.2	8.1
50°-60°	340.0	7.6
60°-70°	282.1	6.3
70°-80°	198.0	4.4
80°-90°	112.7	2.5
90°-100°	281.3	6.3
100°-110°	486.2	10.9
110°-120°	422.6	9.5
120°-130°	345.8	7.8
130°-140°	281.1	6.3
140°-150°	210.1	4.7
150°-160°	146.6	3.3
160°-170°	86.2	1.9
170°-180°	28.0	0.6
0°-30°	534.4	12.0
0°-40°	876.2	19.7
0°-60°	1577.4	35.4
0°-90°	2170.2	48.7
90°-120°	1190.1	26.7
90°-150°	2027.2	45.5
90°-180°	2288.0	51.3
0°-180°	4458.2	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°	13	48	86	110	117	10
95°	29	94	530	317	234	29
105°	73	119	424	873	876	79
115°	122	158	369	692	826	121
125°	166	196	352	580	653	148
135°	195	232	335	502	572	151
145°	224	256	326	412	455	141
155°	254	274	317	359	374	117
165°	277	285	304	322	327	78
175°	289	289	292	296	294	27
180°	289	289	289	289	289	

TEST NUMBER: P1025646

CATALOG NUMBER: S124DIP-B575D590UB40-4F0-XX-W2A-D4

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°	12.9	47.7	86.5	110.0	116.7
92.5°	19.6	82.2	294.5	166.8	151.1
95°	28.8	94.5	530.2	317.2	233.5
97.5°	40.5	96.9	558.8	551.5	423.2
100°	51.7	102.4	515.5	727.3	605.9
102.5°	63.1	109.5	463.3	835.1	765.7
105°	73.4	118.6	423.7	872.8	875.9
107.5°	86.5	128.8	396.5	856.2	925.9
110°	98.8	138.4	382.6	806.1	923.1

TEST NUMBER: P1025646

CATALOG NUMBER: S124DIP-B575D590UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.5	148.4	373.7	745.8	885.0
115°	121.7	158.5	368.7	692.0	826.4
117.5°	134.2	168.3	364.3	648.0	769.6
120°	146.0	177.2	360.4	617.0	721.9
122.5°	157.3	186.6	356.0	595.9	683.2
125°	166.2	196.1	352.4	579.8	653.4
127.5°	175.3	206.4	347.3	563.6	633.7
130°	181.9	215.4	343.0	545.8	615.5
132.5°	189.3	224.0	339.3	525.4	596.3
135°	195.3	232.2	334.8	501.8	571.8
137.5°	202.1	238.6	331.8	477.4	543.9
140°	209.5	245.2	328.9	453.8	514.4
142.5°	216.8	251.2	327.4	432.2	483.3
145°	224.1	255.8	326.2	411.6	455.0
147.5°	232.7	260.8	324.5	393.8	428.4
150°	240.6	265.7	322.8	380.2	405.8
152.5°	247.2	270.2	320.0	369.4	388.7
155°	254.0	274.2	317.1	359.2	374.5
157.5°	260.9	277.9	314.3	349.5	361.5
160°	267.1	281.0	310.9	339.8	349.5
162.5°	272.8	283.6	307.5	330.5	338.2
165°	276.8	285.3	304.1	322.0	326.8
167.5°	281.3	286.7	300.6	314.5	317.7
170°	284.2	287.8	297.2	307.2	309.2
172.5°	287.0	288.7	293.8	300.6	300.6
175°	288.7	289.3	291.5	295.5	294.4
177.5°	289.8	289.3	289.8	291.8	289.8
180°	289.3	289.3	289.3	289.3	289.3

(END OF REPORT)