

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: P1025649

Luminaire Tested: S124DIP-B575D590UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025649
REPORT IS A COMBINATION OF REPORTS P996249 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-F4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

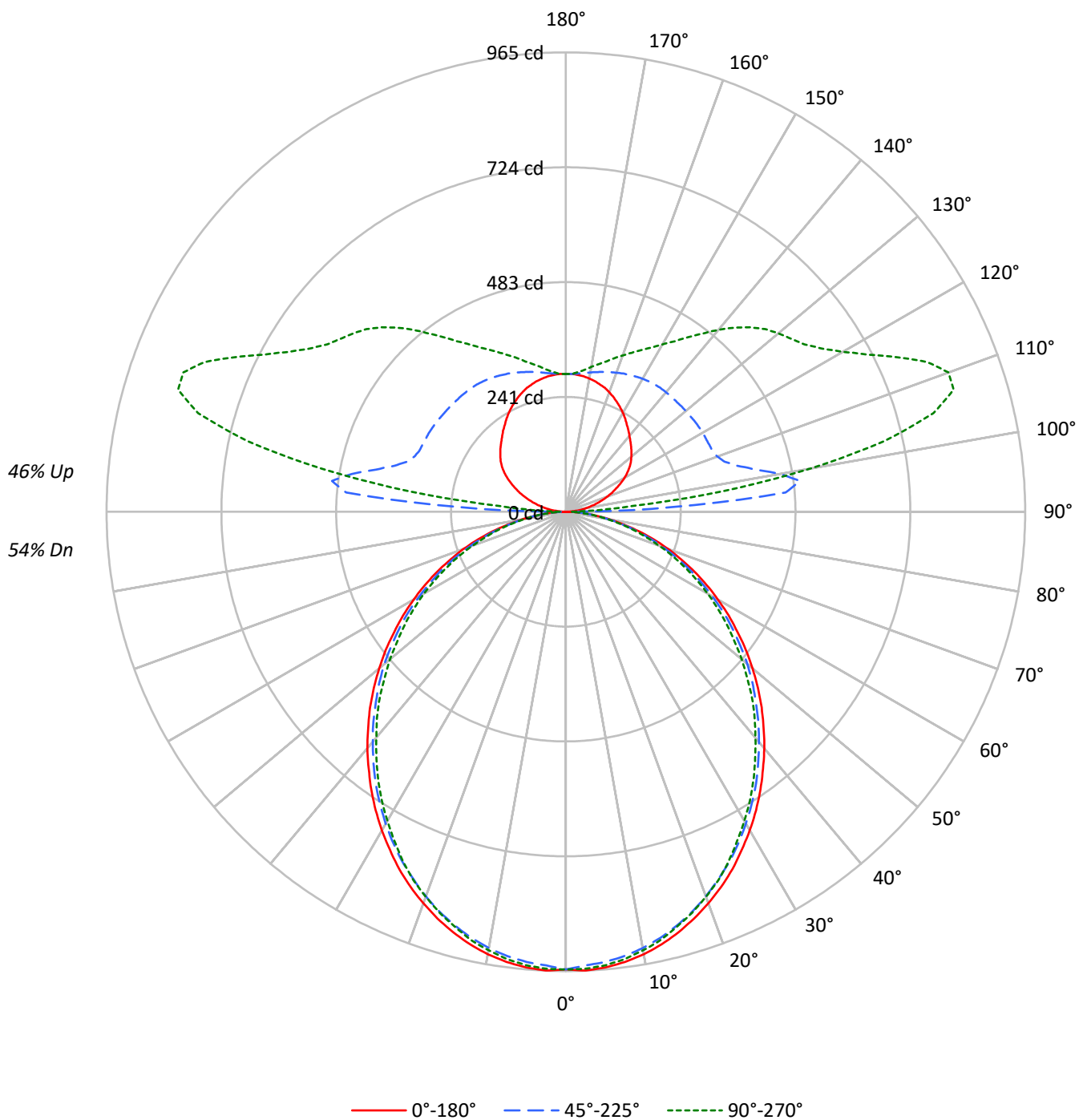
Lumens per Lamp: N/A
Luminaire Lumens: 4580.2 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	94	90	87	91	88	84	81	75	72	70	63	62	60	53	52	50
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	46	44	42
3	82	72	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	60	53	47	51	46	42	44	40	36	37	34	31
5	69	57	49	43	64	53	46	41	46	40	36	39	35	31	33	30	27
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17
10	47	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	5.6
20°-30°	375.8	8.2
30°-40°	436.8	9.5
40°-50°	436.8	9.5
50°-60°	382.0	8.3
60°-70°	283.6	6.2
70°-80°	160.9	3.5
80°-90°	47.2	1.0
90°-100°	214.9	4.7
100°-110°	437.0	9.5
110°-120°	389.5	8.5
120°-130°	327.2	7.1
130°-140°	273.1	6.0
140°-150°	208.5	4.6
150°-160°	146.6	3.2
160°-170°	86.2	1.9
170°-180°	28.0	0.6
0°-30°	721.7	15.8
0°-40°	1158.6	25.3
0°-60°	1977.4	43.2
0°-90°	2469.1	53.9
90°-120°	1041.5	22.7
90°-150°	1850.3	40.4
90°-180°	2111.0	46.1
0°-180°	4580.2	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°	1	4	10	11	12	4
95°	19	59	463	229	139	21
105°	66	96	373	803	800	71
115°	117	147	332	639	768	116
125°	163	194	331	544	613	145
135°	194	231	328	482	548	150
145°	223	256	326	407	447	140
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	

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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°	0.6	4.5	10.2	11.4	11.9
92.5°	8.0	43.8	222.8	73.6	51.7
95°	18.8	59.1	463.2	229.4	138.7
97.5°	31.3	65.4	495.6	468.3	333.0
100°	43.2	73.9	456.9	647.9	521.1
102.5°	54.6	84.1	408.6	760.4	684.8
105°	66.5	96.4	372.8	802.8	799.6
107.5°	79.6	108.8	349.5	790.0	854.2
110°	92.6	121.4	338.7	744.5	855.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.1	133.8	333.6	688.8	821.8
115°	117.1	146.9	332.5	638.8	767.8
117.5°	129.6	159.1	331.9	599.6	714.9
120°	142.1	171.0	331.9	573.2	671.8
122.5°	153.4	182.7	331.3	555.8	637.7
125°	163.1	193.8	330.8	543.6	612.6
127.5°	172.2	204.0	329.6	532.0	596.7
130°	179.6	214.0	329.1	518.0	583.1
132.5°	187.0	222.5	328.5	501.6	567.8
135°	193.8	230.7	327.9	482.5	547.9
137.5°	200.6	237.8	327.9	462.0	524.6
140°	208.0	244.4	327.4	442.2	499.0
142.5°	216.0	250.4	327.4	423.6	471.7
145°	223.3	255.8	326.2	407.0	447.3
147.5°	231.9	260.8	324.5	393.0	424.5
150°	239.8	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)