

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: P1024960

Luminaire Tested: S124DIP-B1020D590UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024960
REPORT IS A COMBINATION OF REPORTS P995335 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D590UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

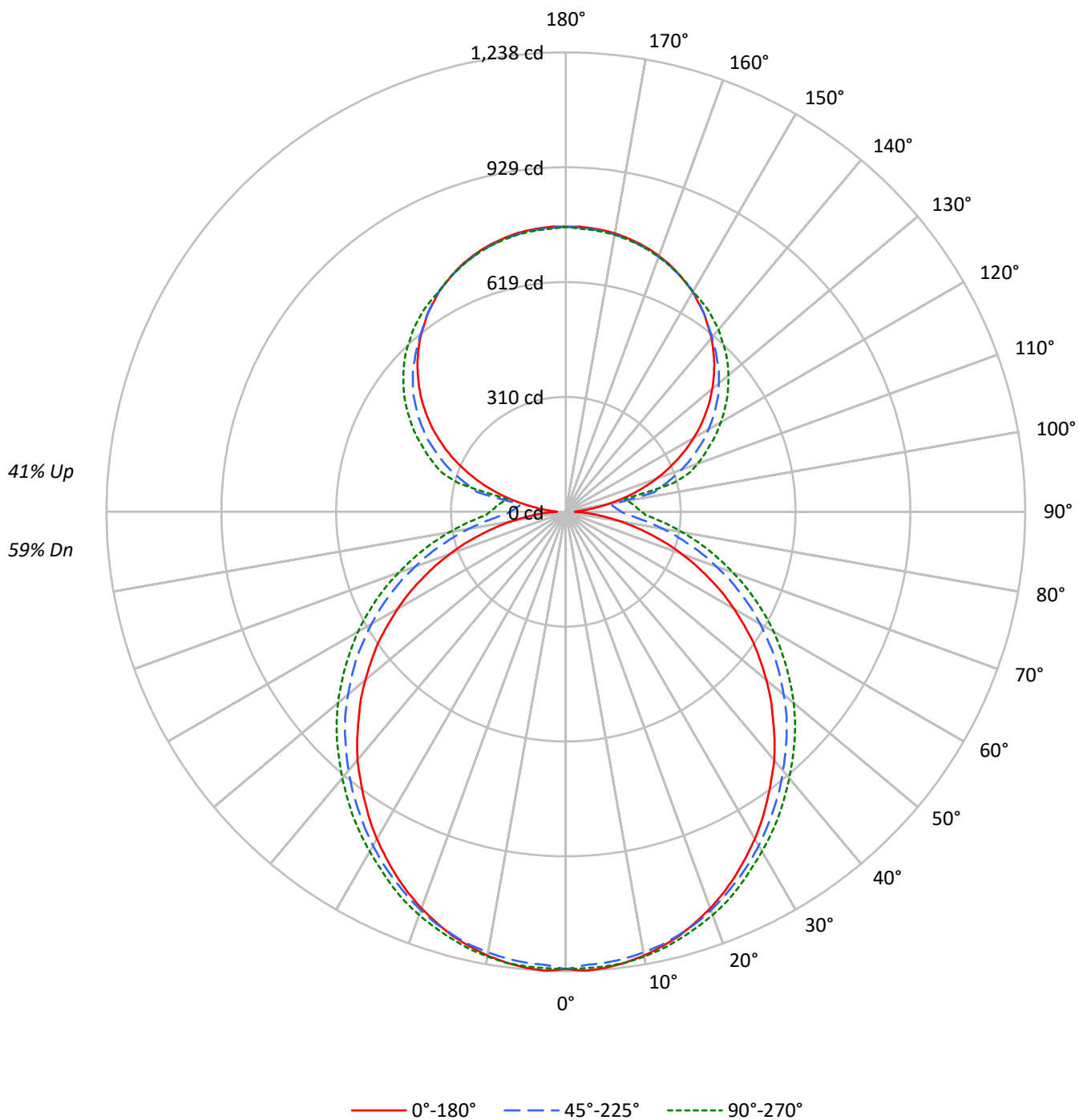
Lumens per Lamp: N/A
Luminaire Lumens: 6579.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 62.2
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	99	94	89	85	92	87	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	56	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	47	49	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	30	33	30	26
6	63	50	41	35	58	47	39	33	41	35	30	35	30	26	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	20
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	16
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10050	10050	10050
5°	10078	9788	9806
10°	10012	9595	9568
15°	9919	9379	9300
20°	9779	9145	9040
25°	9623	8887	8759
30°	9454	8630	8472
35°	9263	8368	8217
40°	9108	8117	7953
45°	8881	7881	7720
50°	8689	7613	7474
55°	8487	7355	7190
60°	8177	7033	6923
65°	7834	6686	6602
70°	7420	6291	6231
75°	6841	5850	5877
80°	6186	5403	5507
85°	5319	4951	5207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.8
10°-20°	334.6	5.1
20°-30°	505.9	7.7
30°-40°	612.0	9.3
40°-50°	647.0	9.8
50°-60°	608.9	9.3
60°-70°	505.3	7.7
70°-80°	354.6	5.4
80°-90°	201.5	3.1
90°-100°	144.5	2.2
100°-110°	256.0	3.9
110°-120°	379.6	5.8
120°-130°	440.1	6.7
130°-140°	449.6	6.8
140°-150°	409.8	6.2
150°-160°	328.2	5.0
160°-170°	211.6	3.2
170°-180°	72.9	1.1
0°-30°	957.3	14.6
0°-40°	1569.3	23.9
0°-60°	2825.3	42.9
0°-90°	3886.7	59.1
90°-120°	780.1	11.9
90°-150°	2079.6	31.6
90°-180°	2692.0	40.9
0°-180°	6579.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1234	1230	1220	1231	1230	117
15°	1183	1184	1180	1192	1191	333
25°	1082	1090	1094	1110	1111	498
35°	947	963	977	996	1001	593
45°	789	816	842	865	872	610
55°	618	647	689	716	725	551
65°	428	472	519	553	564	424
75°	237	288	346	385	398	252
85°	73	131	193	235	248	76
90°	24	85	149	193	205	17
95°	50	76	133	173	186	53
105°	185	216	270	310	300	195
115°	331	345	389	420	430	326
125°	459	460	493	521	530	410
135°	566	565	577	600	610	436
145°	650	650	650	659	666	406
155°	711	712	710	712	711	328
165°	750	748	748	752	747	212
175°	768	764	765	770	763	73
180°	768	768	768	768	768	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1238.0	1233.9	1222.8	1232.5	1231.1
5°	1233.9	1229.7	1220.0	1231.1	1229.7
7.5°	1225.6	1222.8	1214.5	1227.0	1225.6
10°	1214.5	1213.1	1206.2	1218.7	1217.3
12.5°	1199.3	1199.3	1195.2	1206.2	1206.2
15°	1182.8	1184.2	1180.0	1192.4	1191.1
17.5°	1160.7	1164.8	1163.5	1175.9	1174.5
20°	1137.2	1141.4	1142.8	1156.6	1156.6
22.5°	1111.0	1116.5	1119.3	1133.1	1135.9
25°	1082.0	1090.3	1094.5	1109.6	1111.0
27.5°	1050.3	1062.7	1068.2	1082.0	1083.4
30°	1018.5	1029.6	1039.3	1054.4	1057.2
32.5°	984.0	997.8	1008.9	1026.8	1029.6
35°	946.8	963.3	977.1	996.5	1000.6
37.5°	909.5	928.8	945.4	964.7	968.9
40°	873.6	891.6	910.9	931.6	937.1
42.5°	832.2	852.9	876.4	899.9	904.0
45°	789.4	815.7	841.9	865.4	872.3
47.5°	749.4	775.6	806.0	829.5	837.7
50°	705.3	735.6	766.0	793.6	801.9
52.5°	661.1	691.5	727.3	754.9	763.2
55°	618.3	647.3	688.7	716.3	724.6
57.5°	570.0	605.9	645.9	679.0	685.9
60°	523.1	559.0	604.5	636.2	647.3
62.5°	477.5	517.6	563.1	594.8	605.9
65°	427.8	472.0	518.9	553.4	564.5
67.5°	380.9	427.8	477.5	512.0	523.1
70°	332.6	379.5	432.0	469.2	478.9
72.5°	285.7	334.0	390.6	426.5	437.5
75°	237.4	288.5	346.4	385.1	397.5
77.5°	191.8	245.7	306.4	345.0	358.8
80°	150.4	205.6	266.4	307.8	318.8
82.5°	109.0	167.0	227.7	270.5	282.9
85°	73.1	131.1	193.2	234.6	248.4
87.5°	45.5	102.1	162.9	202.9	215.3
90°	23.8	85.3	149.2	192.8	204.9
92.5°	29.3	76.5	140.5	182.5	193.5
95°	49.5	75.6	132.7	173.4	186.5
97.5°	76.9	129.5	125.8	164.6	177.6
100°	109.4	155.6	130.2	157.7	167.9
102.5°	147.3	184.4	243.8	150.6	161.6
105°	185.2	216.3	270.2	309.9	300.2
107.5°	222.5	247.8	300.1	337.5	349.5
110°	259.0	280.2	331.9	364.8	377.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	294.5	314.4	361.2	390.9	404.3
115°	331.0	345.1	388.7	420.2	429.9
117.5°	364.9	375.5	418.6	446.9	458.0
120°	397.9	404.3	443.8	472.6	482.4
122.5°	430.1	431.2	469.7	497.8	506.3
125°	459.1	460.0	493.3	521.4	530.1
127.5°	488.4	487.5	518.0	542.3	551.4
130°	515.1	514.4	538.1	563.6	571.9
132.5°	540.9	540.8	559.6	583.7	591.4
135°	565.5	564.9	576.8	600.1	609.5
137.5°	588.5	587.1	595.4	617.3	623.6
140°	610.8	610.6	613.1	632.8	640.2
142.5°	629.5	631.8	631.0	647.4	652.9
145°	650.2	650.5	650.5	659.4	666.1
147.5°	666.3	668.3	667.8	669.7	675.8
150°	684.1	685.0	684.4	684.4	685.0
152.5°	697.6	699.3	698.2	699.3	698.8
155°	711.4	712.0	710.2	712.5	710.8
157.5°	723.5	723.5	721.2	724.0	721.2
160°	733.8	732.1	731.5	734.9	731.5
162.5°	743.0	740.7	740.1	743.5	739.5
165°	750.4	747.6	747.6	752.2	747.0
167.5°	756.8	753.9	753.3	758.5	752.7
170°	761.9	758.5	759.0	763.6	757.9
172.5°	765.4	761.9	762.5	767.1	760.8
175°	767.7	764.2	764.8	770.0	763.1
177.5°	769.4	765.4	766.5	771.1	764.2
180°	767.7	767.7	767.7	767.7	767.7

(END OF REPORT)