

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: P1024961

Luminaire Tested: S124DIP-B1020D590UB35-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024961
REPORT IS A COMBINATION OF REPORTS P995336 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-D1
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

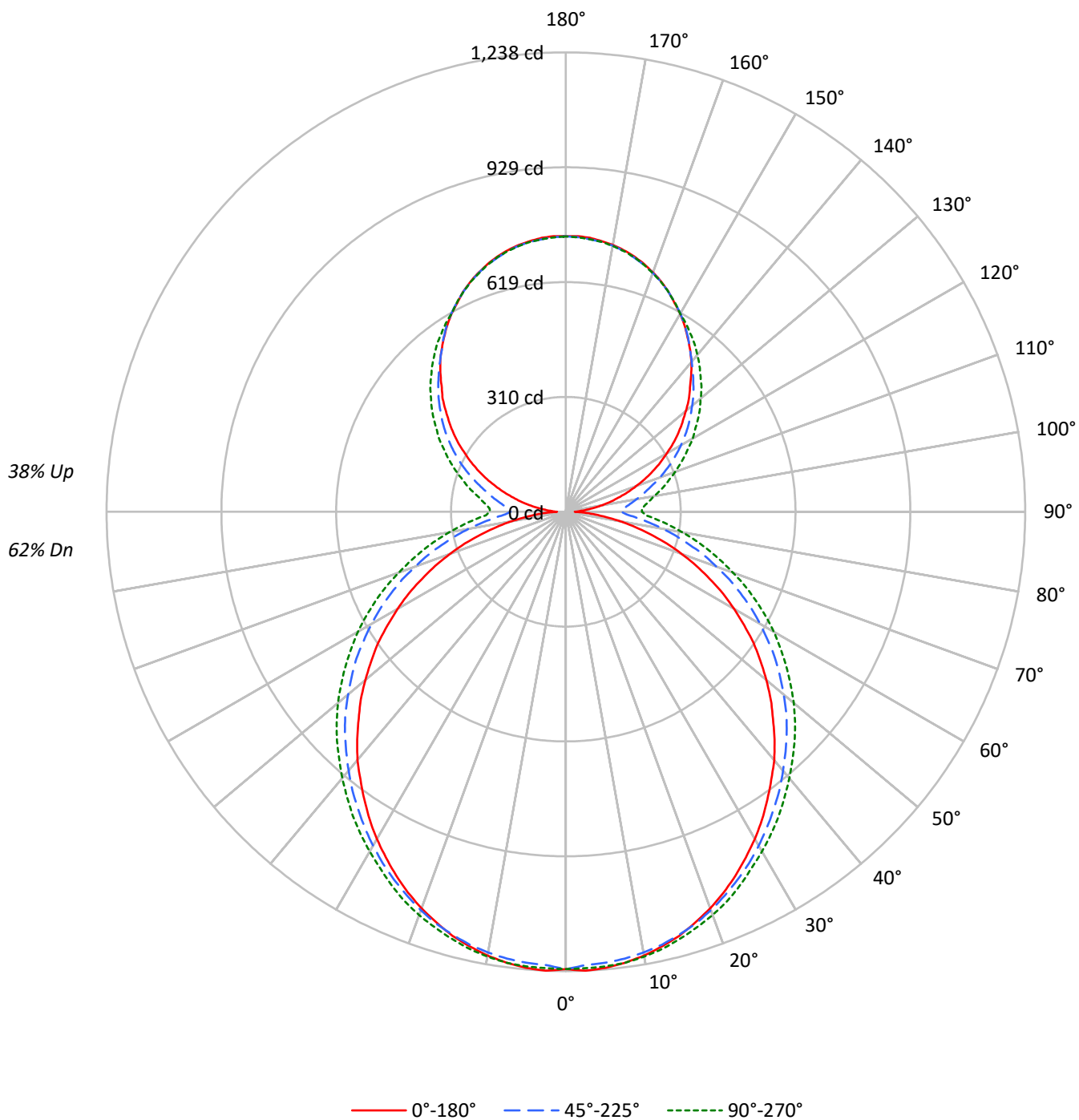
Lumens per Lamp: N/A
Luminaire Lumens: 6263.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	93	88	84	81	77	74	71	67	65	63	57	56	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	50	47	45
3	82	71	63	57	76	67	60	54	59	53	48	51	46	43	44	40	37
4	75	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32
5	68	56	47	41	64	53	45	39	46	40	35	40	35	31	35	31	28
6	63	50	41	35	59	47	39	34	42	35	30	36	31	27	31	27	24
7	58	45	37	31	54	43	35	29	38	31	27	33	28	24	29	25	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	33	26	21	29	23	19	26	21	17	22	18	16

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	1.9
10°-20°	334.6	5.3
20°-30°	505.9	8.1
30°-40°	612.0	9.8
40°-50°	647.0	10.3
50°-60°	608.9	9.7
60°-70°	505.3	8.1
70°-80°	354.6	5.7
80°-90°	201.5	3.2
90°-100°	167.4	2.7
100°-110°	233.0	3.7
110°-120°	305.3	4.9
120°-130°	358.0	5.7
130°-140°	379.1	6.1
140°-150°	361.3	5.8
150°-160°	301.5	4.8
160°-170°	200.6	3.2
170°-180°	70.2	1.1
0°-30°	957.3	15.3
0°-40°	1569.3	25.1
0°-60°	2825.3	45.1
0°-90°	3886.7	62.1
90°-120°	705.8	11.3
90°-150°	1804.1	28.8
90°-180°	2376.0	37.9
0°-180°	6263.0	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	18
95°	52	103	164	203	215	52
105°	146	174	228	264	277	156
115°	259	271	314	344	353	256
125°	370	369	402	428	435	330
135°	473	476	486	507	514	366
145°	573	574	574	582	586	359
155°	654	654	654	656	654	301
165°	712	711	710	713	711	201
175°	741	738	738	742	738	70
180°	742	742	742	742	742	

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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°	35.6	91.4	153.7	194.0	205.6
95°	52.3	103.1	163.7	202.6	215.1
97.5°	71.7	116.3	177.5	215.7	228.1
100°	95.6	133.8	192.7	231.2	240.8
102.5°	122.0	152.8	209.9	247.6	259.1
105°	146.2	174.3	227.7	263.9	276.7
107.5°	174.3	198.4	247.2	284.0	293.1
110°	201.6	222.1	269.9	300.4	313.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	230.1	246.6	291.1	321.4	332.5
115°	258.6	271.0	314.0	343.8	352.9
117.5°	286.7	295.0	335.8	363.0	372.4
120°	313.4	319.8	358.2	382.9	395.1
122.5°	342.7	343.3	380.0	405.9	412.6
125°	370.0	368.6	402.5	427.7	434.7
127.5°	395.8	396.2	422.6	446.4	455.4
130°	422.0	422.4	444.4	468.2	474.2
132.5°	450.1	450.0	465.9	488.3	496.0
135°	472.9	476.4	486.0	506.9	513.5
137.5°	499.9	500.2	506.9	525.9	533.3
140°	526.9	526.6	528.0	545.4	551.7
142.5°	550.2	551.3	549.4	564.6	570.1
145°	572.6	573.5	574.0	581.8	585.5
147.5°	595.5	597.0	596.4	597.2	602.2
150°	616.2	617.1	617.1	617.1	616.5
152.5°	634.3	635.5	636.0	637.8	636.0
155°	654.4	654.4	653.8	656.1	653.8
157.5°	671.6	670.5	670.5	672.2	670.5
160°	686.5	686.0	685.4	687.1	684.3
162.5°	700.3	698.6	698.0	701.5	698.6
165°	712.4	710.7	709.5	713.0	710.7
167.5°	722.1	719.8	719.8	723.3	719.8
170°	730.2	727.3	727.9	731.3	727.3
172.5°	735.9	733.6	733.6	737.6	733.6
175°	741.1	738.2	737.6	741.7	737.6
177.5°	743.4	740.5	740.5	744.5	739.9
180°	742.2	742.2	742.2	742.2	742.2

(END OF REPORT)