

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: P1024952

Luminaire Tested: S124DIP-B1020D590UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024952
REPORT IS A COMBINATION OF REPORTS P995327 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D590UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

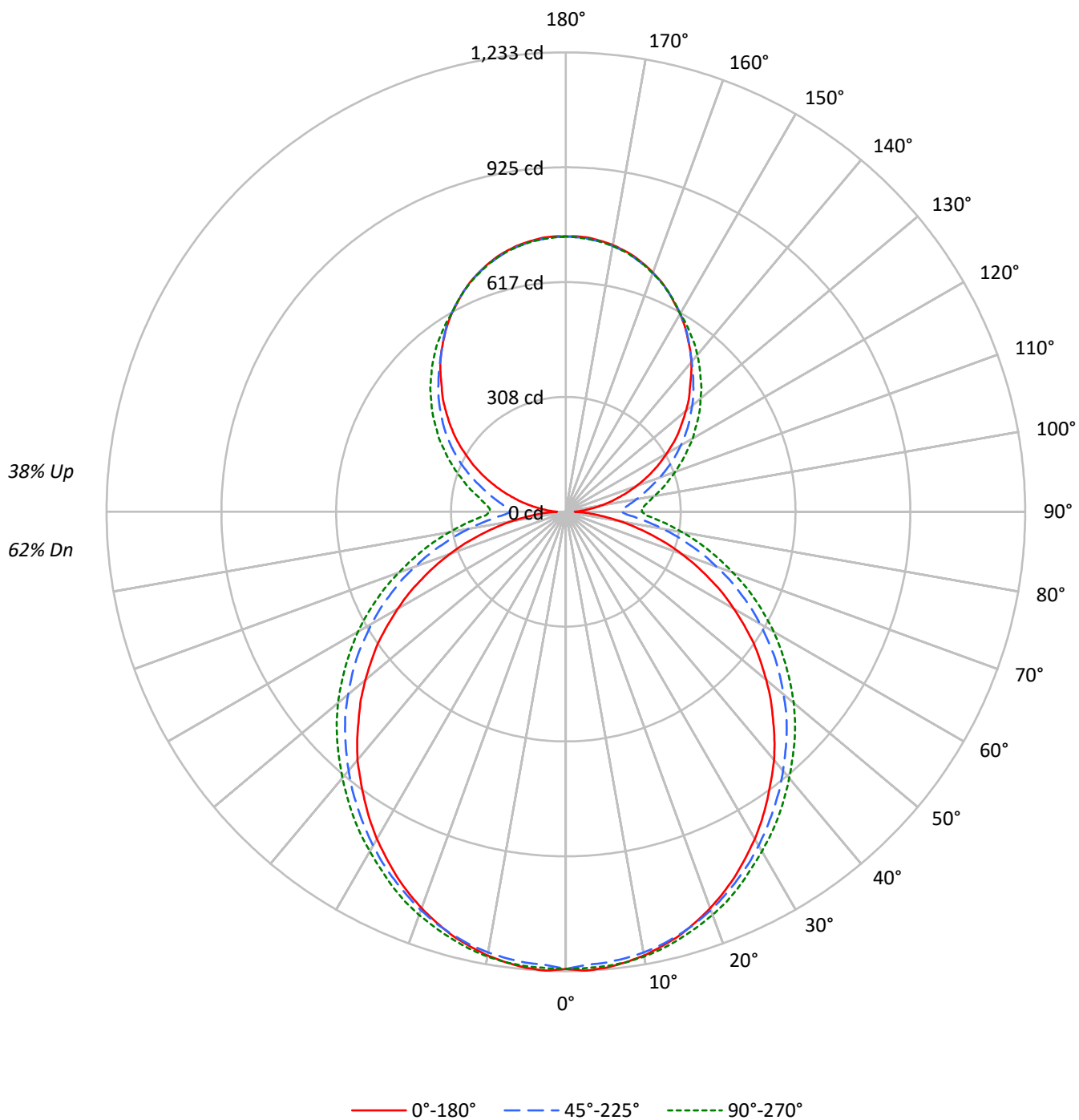
Lumens per Lamp: N/A
Luminaire Lumens: 6236.0 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	10007	10007	10007
5°	10035	9746	9764
10°	9969	9555	9527
15°	9876	9339	9260
20°	9738	9106	9001
25°	9582	8848	8722
30°	9414	8593	8436
35°	9223	8333	8182
40°	9070	8082	7919
45°	8844	7847	7686
50°	8650	7580	7441
55°	8452	7323	7159
60°	8141	7003	6893
65°	7801	6658	6574
70°	7389	6263	6205
75°	6813	5825	5852
80°	6161	5378	5483
85°	5298	4930	5186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8844 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.9
10°-20°	333.2	5.3
20°-30°	503.7	8.1
30°-40°	609.4	9.8
40°-50°	644.3	10.3
50°-60°	606.3	9.7
60°-70°	503.1	8.1
70°-80°	353.1	5.7
80°-90°	200.6	3.2
90°-100°	166.7	2.7
100°-110°	232.0	3.7
110°-120°	304.0	4.9
120°-130°	356.4	5.7
130°-140°	377.4	6.1
140°-150°	359.7	5.8
150°-160°	300.1	4.8
160°-170°	199.7	3.2
170°-180°	69.9	1.1
0°-30°	953.2	15.3
0°-40°	1562.6	25.1
0°-60°	2813.2	45.1
0°-90°	3870.1	62.1
90°-120°	702.7	11.3
90°-150°	1796.2	28.8
90°-180°	2366.0	37.9
0°-180°	6236.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1229	1224	1215	1226	1224	117
15°	1178	1179	1175	1187	1186	332
25°	1077	1086	1090	1105	1106	496
35°	943	959	973	992	996	590
45°	786	812	838	862	868	608
55°	616	644	686	713	722	549
65°	426	470	517	551	562	422
75°	236	287	345	383	396	251
85°	73	131	192	234	247	76
90°	24	85	149	192	204	18
95°	52	103	163	202	214	51
105°	146	174	227	263	276	155
115°	257	270	313	342	351	254
125°	368	367	401	426	433	329
135°	471	474	484	505	511	365
145°	570	571	572	579	583	357
155°	652	652	651	653	651	300
165°	709	708	706	710	708	200
175°	738	735	734	738	734	70
180°	739	739	739	739	739	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.2	1227.2	1227.2	1227.2	1227.2
2.5°	1232.7	1228.6	1217.6	1227.2	1225.8
5°	1228.6	1224.4	1214.8	1225.8	1224.4
7.5°	1220.3	1217.6	1209.3	1221.7	1220.3
10°	1209.3	1208.0	1201.1	1213.4	1212.1
12.5°	1194.2	1194.2	1190.1	1201.1	1201.1
15°	1177.7	1179.1	1175.0	1187.3	1186.0
17.5°	1155.7	1159.9	1158.5	1170.8	1169.5
20°	1132.4	1136.5	1137.9	1151.6	1151.6
22.5°	1106.3	1111.8	1114.5	1128.2	1131.0
25°	1077.4	1085.6	1089.8	1104.9	1106.3
27.5°	1045.8	1058.2	1063.7	1077.4	1078.8
30°	1014.2	1025.2	1034.8	1049.9	1052.7
32.5°	979.8	993.6	1004.6	1022.4	1025.2
35°	942.7	959.2	973.0	992.2	996.3
37.5°	905.6	924.9	941.4	960.6	964.7
40°	869.9	887.8	907.0	927.6	933.1
42.5°	828.7	849.3	872.6	896.0	900.1
45°	786.1	812.2	838.3	861.6	868.5
47.5°	746.2	772.3	802.6	825.9	834.2
50°	702.2	732.5	762.7	790.2	798.4
52.5°	658.3	688.5	724.2	751.7	760.0
55°	615.7	644.5	685.7	713.2	721.5
57.5°	567.6	603.3	643.1	676.1	683.0
60°	520.8	556.6	601.9	633.5	644.5
62.5°	475.5	515.3	560.7	592.3	603.3
65°	426.0	470.0	516.7	551.1	562.1
67.5°	379.3	426.0	475.5	509.8	520.8
70°	331.2	377.9	430.1	467.2	476.9
72.5°	284.5	332.6	388.9	424.6	435.6
75°	236.4	287.2	344.9	383.4	395.8
77.5°	191.0	244.6	305.1	343.6	357.3
80°	149.8	204.8	265.2	306.5	317.4
82.5°	108.6	166.3	226.7	269.4	281.7
85°	72.8	130.6	192.4	233.6	247.4
87.5°	45.3	101.7	162.2	202.0	214.4
90°	23.7	85.0	148.6	191.9	204.0
92.5°	35.5	91.0	152.9	193.2	204.7
95°	52.2	102.6	163.0	201.9	214.2
97.5°	71.4	115.7	176.7	214.7	227.1
100°	95.1	133.1	191.8	230.1	239.8
102.5°	121.4	152.2	209.0	246.5	258.0
105°	145.6	173.6	226.7	262.8	275.5
107.5°	173.6	197.4	246.1	282.8	291.8
110°	200.7	221.1	268.6	299.1	311.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.1	245.6	289.8	320.0	331.0
115°	257.4	269.8	312.6	342.3	351.3
117.5°	285.4	293.7	334.3	361.5	370.8
120°	312.1	318.5	356.6	381.2	393.4
122.5°	341.2	341.8	378.3	404.1	410.9
125°	368.4	367.0	400.8	425.8	432.9
127.5°	394.1	394.5	420.8	444.4	453.5
130°	420.2	420.5	442.5	466.1	472.1
132.5°	448.2	447.9	463.9	486.1	493.7
135°	470.8	474.2	483.9	504.8	511.3
137.5°	497.6	498.1	504.7	523.6	531.1
140°	524.5	524.3	525.6	543.0	549.3
142.5°	547.8	548.9	547.0	562.1	567.6
145°	570.1	571.0	571.5	579.2	582.9
147.5°	592.9	594.4	593.8	594.6	599.6
150°	613.5	614.4	614.4	614.4	613.8
152.5°	631.5	632.7	633.3	635.0	633.3
155°	651.5	651.5	651.0	653.3	651.0
157.5°	668.7	667.5	667.5	669.3	667.5
160°	683.5	683.0	682.4	684.1	681.3
162.5°	697.3	695.6	695.0	698.4	695.6
165°	709.3	707.6	706.4	709.8	707.6
167.5°	719.0	716.7	716.7	720.1	716.7
170°	727.0	724.1	724.7	728.1	724.1
172.5°	732.7	730.4	730.4	734.4	730.4
175°	737.8	735.0	734.4	738.4	734.4
177.5°	740.1	737.3	737.3	741.3	736.7
180°	739.0	739.0	739.0	739.0	739.0

(END OF REPORT)