

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: P1024906

Luminaire Tested: S124DIP-B1020D365UB30-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024906
REPORT IS A COMBINATION OF REPORTS P995266 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D365UB30-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

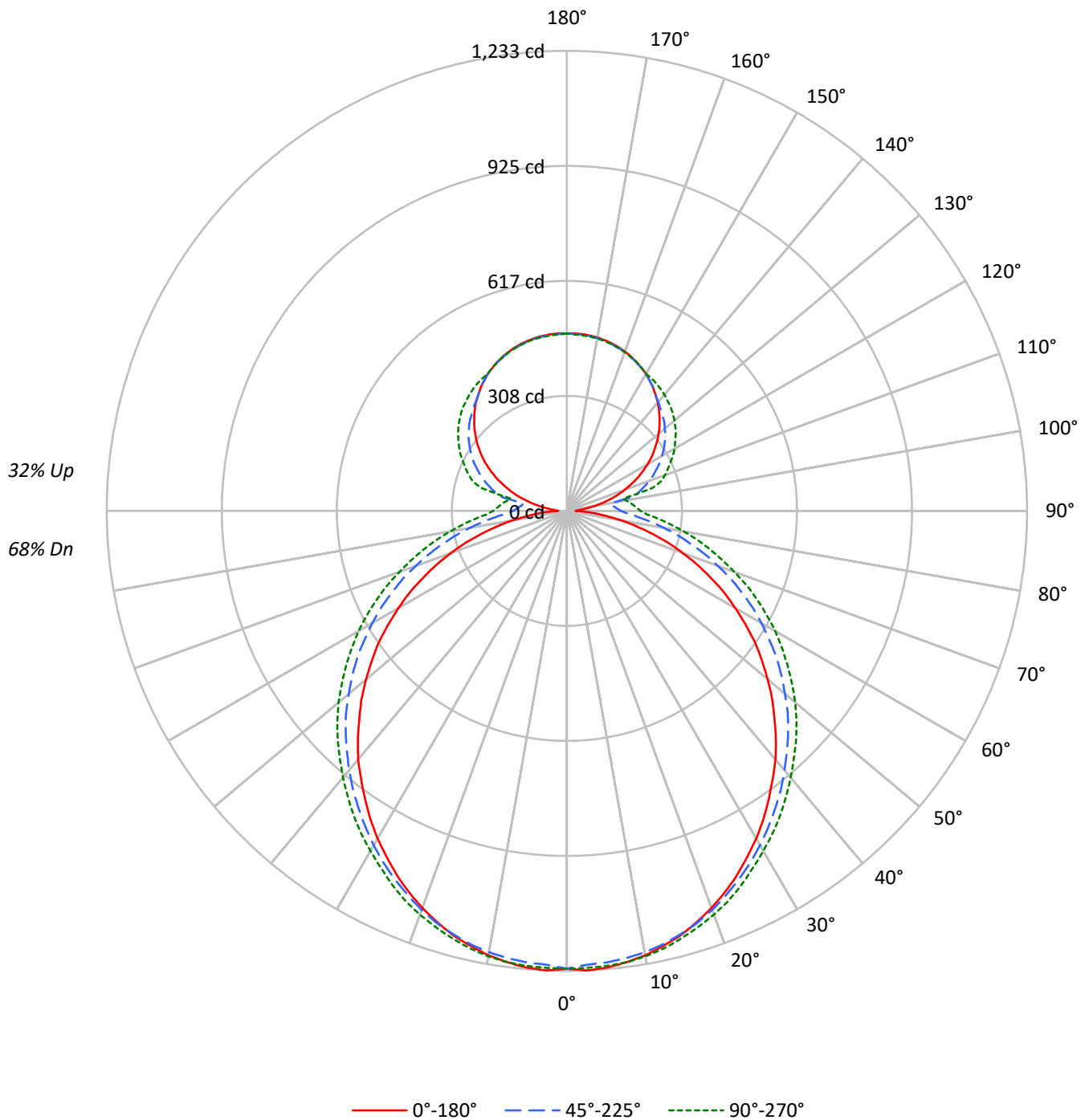
Lumens per Lamp: N/A
Luminaire Lumens: 5656.0 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73
1	101	95	91	87	95	90	86	83	80	77	74	71	69	66	62	61	59
2	91	83	76	70	85	78	72	67	69	65	60	61	58	54	54	51	49
3	83	72	64	58	78	68	61	55	61	55	50	54	49	45	47	44	41
4	75	64	55	48	71	60	52	46	54	47	42	48	43	38	42	38	35
5	69	57	48	41	65	54	46	40	48	41	36	43	37	33	38	33	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	34	30	26
7	59	46	37	31	55	43	36	30	39	33	28	35	30	25	31	27	23
8	55	42	33	28	51	40	32	27	36	29	25	32	27	23	29	24	21
9	51	38	30	25	48	36	29	24	33	26	22	29	24	20	26	22	19
10	48	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

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	2.1
10°-20°	333.2	5.9
20°-30°	503.7	8.9
30°-40°	609.4	10.8
40°-50°	644.3	11.4
50°-60°	606.3	10.7
60°-70°	503.1	8.9
70°-80°	353.1	6.2
80°-90°	200.0	3.5
90°-100°	134.3	2.4
100°-110°	191.7	3.4
110°-120°	257.3	4.5
120°-130°	285.1	5.0
130°-140°	283.8	5.0
140°-150°	254.8	4.5
150°-160°	203.2	3.6
160°-170°	131.1	2.3
170°-180°	45.2	0.8
0°-30°	953.2	16.9
0°-40°	1562.6	27.6
0°-60°	2813.2	49.7
0°-90°	3869.5	68.4
90°-120°	583.3	10.3
90°-150°	1407.1	24.9
90°-180°	1787.0	31.6
0°-180°	5656.0	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°	23	82	144	186	198	16
95°	38	71	127	167	179	38
105°	119	149	202	239	237	126
115°	208	222	265	296	306	205
125°	286	286	320	347	356	256
135°	351	351	362	385	394	271
145°	403	403	403	411	418	252
155°	440	441	440	441	440	203
165°	465	463	463	466	463	131
175°	475	473	474	477	472	45
180°	475	475	475	475	475	

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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°	23.1	82.0	143.8	185.9	197.6
92.5°	25.9	73.3	135.3	175.9	186.9
95°	37.5	70.7	127.4	166.7	179.3
97.5°	53.8	101.5	120.5	158.0	170.8
100°	73.4	115.5	120.0	151.1	161.2
102.5°	96.9	131.3	187.9	143.6	154.6
105°	119.4	149.1	201.6	239.2	237.3
107.5°	142.5	166.9	217.5	253.7	264.7
110°	164.6	184.9	235.1	267.4	279.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	186.0	204.6	250.7	280.5	293.0
115°	208.0	221.5	265.1	296.0	305.6
117.5°	229.0	238.7	281.0	309.5	320.5
120°	249.0	254.6	294.0	322.2	332.5
122.5°	269.0	269.7	307.5	335.3	344.2
125°	286.4	286.4	320.1	347.3	355.8
127.5°	304.5	303.5	332.8	357.1	366.5
130°	320.6	319.5	342.6	367.7	375.9
132.5°	336.6	335.9	353.8	377.5	385.4
135°	351.2	350.8	361.9	384.6	393.5
137.5°	365.4	364.1	371.4	392.7	399.2
140°	379.2	378.7	380.7	399.6	406.9
142.5°	390.4	391.8	390.8	406.6	412.1
145°	403.2	402.9	402.9	411.4	417.6
147.5°	413.1	413.9	413.5	415.3	421.1
150°	424.2	424.2	423.8	423.8	424.2
152.5°	432.0	433.1	432.4	433.1	432.7
155°	440.5	440.9	439.8	441.3	440.2
157.5°	448.0	448.0	446.6	448.4	446.6
160°	454.4	453.3	453.0	455.1	453.0
162.5°	460.1	458.7	458.3	460.5	458.0
165°	464.7	462.9	462.9	465.8	462.6
167.5°	468.6	466.9	466.5	469.7	466.1
170°	471.8	469.7	470.1	472.9	469.3
172.5°	474.0	471.8	472.2	475.0	471.1
175°	475.4	473.3	473.6	476.8	472.5
177.5°	476.5	474.0	474.7	477.5	473.3
180°	475.4	475.4	475.4	475.4	475.4

(END OF REPORT)