

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: P1024998

Luminaire Tested: S124DIP-B1020D810UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024998
REPORT IS A COMBINATION OF REPORTS P995388 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D810UB30-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

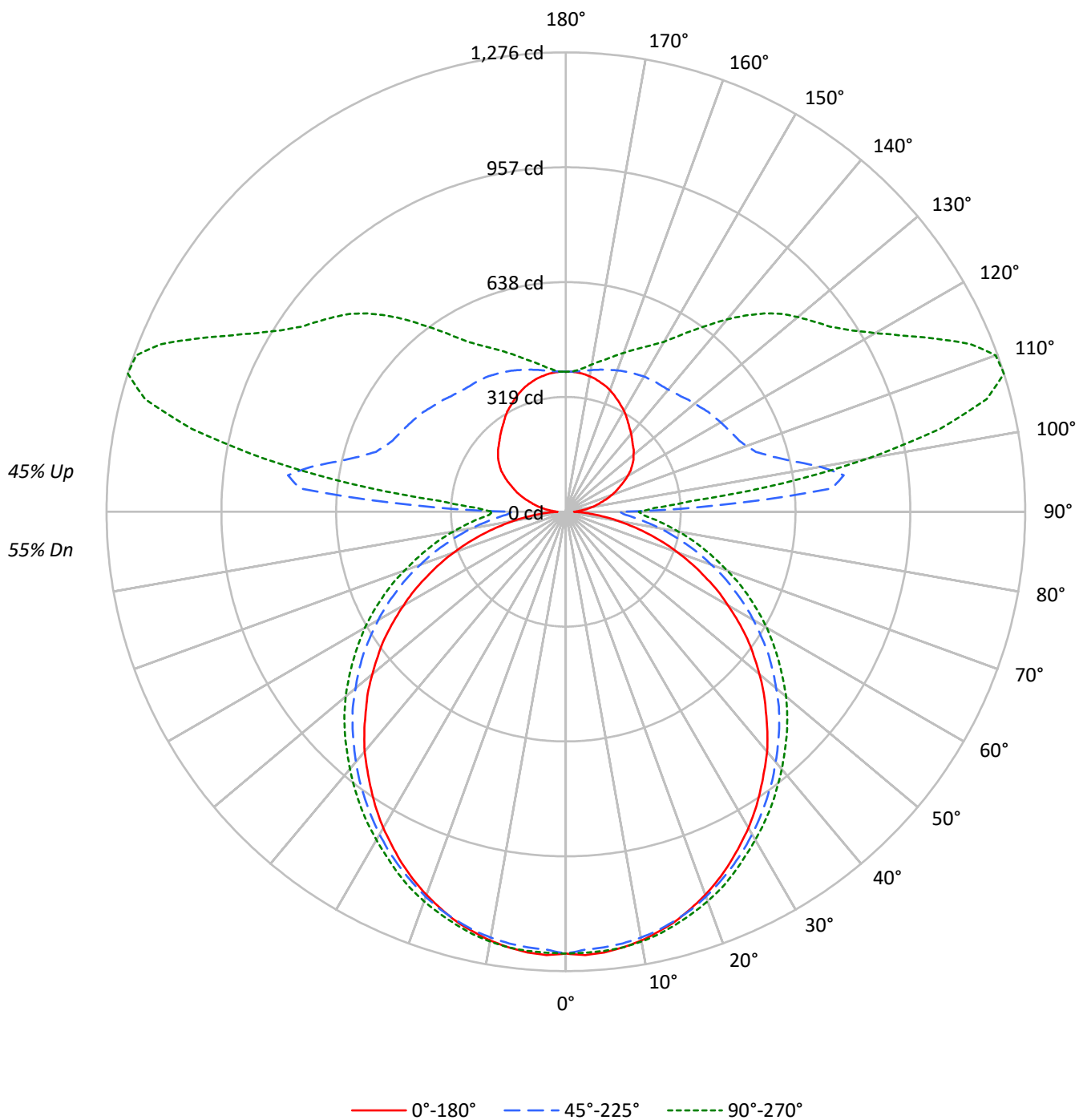
Lumens per Lamp: N/A
Luminaire Lumens: 7022.6 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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	101	101	101	101	86	86	86	73	73	73	61	61	61
1	98	93	89	85	91	86	83	79	74	71	69	63	60	59	52	51	49
2	89	81	74	68	82	75	69	64	64	60	56	54	51	48	45	43	41
3	81	70	63	56	74	65	59	53	56	51	46	48	43	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	47	40	62	51	44	38	44	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	38	33	40	34	29	34	29	25	28	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	22	26	22	19
8	53	40	32	27	49	38	30	25	33	27	23	28	23	20	24	20	17
9	49	37	29	24	46	34	27	23	30	24	20	26	21	18	22	18	15
10	46	34	26	21	43	32	25	20	28	22	18	24	19	16	20	17	14

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	1.7
10°-20°	333.2	4.7
20°-30°	503.7	7.2
30°-40°	609.4	8.7
40°-50°	644.3	9.2
50°-60°	606.3	8.6
60°-70°	503.1	7.2
70°-80°	353.1	5.0
80°-90°	200.6	2.9
90°-100°	407.3	5.8
100°-110°	675.1	9.6
110°-120°	582.4	8.3
120°-130°	472.9	6.7
130°-140°	381.3	5.4
140°-150°	283.1	4.0
150°-160°	197.0	2.8
160°-170°	115.9	1.6
170°-180°	37.7	0.5
0°-30°	953.2	13.6
0°-40°	1562.6	22.3
0°-60°	2813.2	40.1
0°-90°	3870.0	55.1
90°-120°	1664.8	23.7
90°-150°	2802.1	39.9
90°-180°	3153.0	44.9
0°-180°	7022.6	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	83	150	191	203	17
95°	43	143	742	465	355	42
105°	102	169	592	1204	1211	109
115°	166	218	511	953	1136	165
125°	225	265	483	795	896	201
135°	263	313	453	683	779	204
145°	302	344	438	555	615	189
155°	341	369	426	483	503	158
165°	372	383	409	433	439	105
175°	388	389	392	397	396	37
180°	389	389	389	389	389	

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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°	22.8	83.1	149.7	191.2	202.9
92.5°	31.3	127.5	427.2	265.2	246.8
95°	43.1	142.6	742.1	464.8	355.4
97.5°	58.5	144.1	778.7	777.8	608.4
100°	73.1	150.1	718.5	1012.2	851.6
102.5°	88.4	158.4	646.8	1155.2	1064.7
105°	101.8	169.4	591.7	1203.9	1210.6
107.5°	119.3	182.0	553.5	1179.9	1275.8
110°	135.5	193.3	533.5	1110.4	1270.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	150.9	206.0	519.8	1027.4	1217.1
115°	165.5	218.0	511.4	953.3	1136.3
117.5°	182.3	230.4	503.7	892.4	1058.4
120°	197.8	240.9	496.8	848.6	992.1
122.5°	213.1	252.4	489.3	818.5	938.1
125°	224.7	264.6	483.0	795.2	896.2
127.5°	236.9	278.3	474.6	771.2	868.0
130°	245.5	290.2	466.9	745.6	841.3
132.5°	255.4	301.7	460.7	716.6	813.8
135°	263.1	312.8	453.1	682.8	778.9
137.5°	272.3	321.0	447.6	648.4	739.4
140°	282.2	329.8	442.6	614.8	698.1
142.5°	291.6	337.8	439.9	584.5	654.5
145°	301.6	343.7	438.4	555.1	614.8
147.5°	313.0	350.5	436.1	529.6	577.4
150°	323.7	357.0	433.8	511.0	545.3
152.5°	332.2	363.2	430.0	496.4	522.4
155°	341.4	368.6	426.2	482.7	503.3
157.5°	350.6	373.5	422.4	469.7	485.8
160°	359.0	377.7	417.8	456.8	469.7
162.5°	366.6	381.2	413.2	444.2	454.4
165°	372.0	383.4	408.6	432.7	439.2
167.5°	378.1	385.3	404.0	422.8	427.0
170°	381.9	386.8	399.5	412.8	415.5
172.5°	385.7	388.0	394.9	404.0	404.0
175°	388.0	388.8	391.8	397.2	395.6
177.5°	389.5	388.8	389.5	392.2	389.5
180°	388.8	388.8	388.8	388.8	388.8

(END OF REPORT)