

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: P1033185

Luminaire Tested: S124DIW-B1020D470UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033185
REPORT IS A COMBINATION OF REPORTS P996851 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D470UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

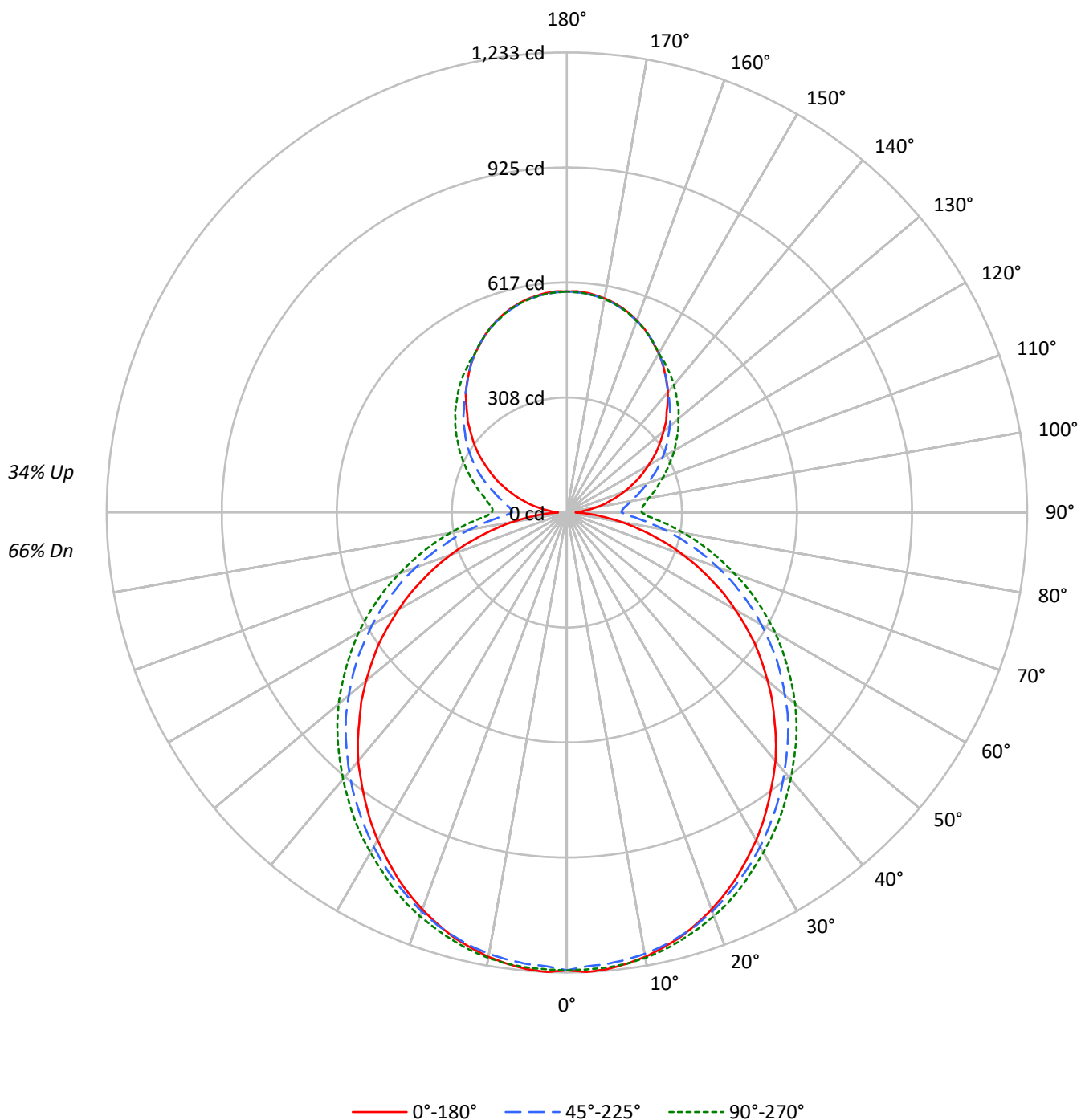
Lumens per Lamp: N/A
Luminaire Lumens: 5829.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71
1	100	95	91	87	94	90	86	82	79	76	73	70	67	65	61	59	57
2	91	82	75	70	85	78	71	66	69	64	60	60	57	53	53	50	47
3	82	72	64	57	77	68	61	55	60	54	50	53	48	45	46	43	40
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34
5	69	56	48	41	64	53	45	39	47	41	36	42	37	33	37	33	29
6	63	51	42	36	59	48	40	34	43	36	31	38	32	28	33	29	26
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23
8	54	41	33	28	51	39	32	26	35	29	24	31	26	22	28	23	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	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	2.0
10°-20°	333.2	5.7
20°-30°	503.7	8.6
30°-40°	609.4	10.5
40°-50°	644.3	11.1
50°-60°	606.3	10.4
60°-70°	503.1	8.6
70°-80°	353.1	6.1
80°-90°	200.3	3.4
90°-100°	157.1	2.7
100°-110°	203.4	3.5
110°-120°	255.4	4.4
120°-130°	292.3	5.0
130°-140°	305.4	5.2
140°-150°	288.9	5.0
150°-160°	240.6	4.1
160°-170°	160.1	2.7
170°-180°	56.1	1.0
0°-30°	953.2	16.4
0°-40°	1562.6	26.8
0°-60°	2813.2	48.3
0°-90°	3869.8	66.4
90°-120°	615.9	10.6
90°-150°	1502.5	25.8
90°-180°	1959.0	33.6
0°-180°	5829.0	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	83	146	189	201	17
95°	45	95	154	193	205	44
105°	119	147	200	236	248	127
115°	208	220	263	293	302	206
125°	296	295	329	354	361	265
135°	378	381	390	412	418	293
145°	457	458	458	466	470	286
155°	522	522	522	524	522	240
165°	569	567	566	569	567	160
175°	592	589	589	592	589	56
180°	592	592	592	592	592	

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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°	23.4	83.4	146.1	188.7	200.6
92.5°	32.5	86.6	148.0	187.8	199.3
95°	45.4	94.8	154.4	192.9	205.2
97.5°	60.5	103.9	164.0	201.5	213.9
100°	79.2	116.8	174.5	212.5	222.2
102.5°	100.3	131.0	186.9	224.0	235.5
105°	119.2	147.1	199.7	235.5	247.8
107.5°	141.6	165.4	213.9	250.2	259.3
110°	163.1	183.2	230.9	261.6	273.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	185.5	202.0	246.5	276.7	287.7
115°	208.0	220.4	263.4	293.2	302.3
117.5°	230.4	238.7	279.5	307.0	316.6
120°	251.6	257.5	295.9	321.1	333.0
122.5°	274.9	275.4	312.0	338.2	345.5
125°	296.4	295.0	329.0	354.2	361.4
127.5°	317.1	317.0	343.6	367.4	376.6
130°	337.6	337.6	359.6	383.5	389.9
132.5°	360.1	359.6	375.7	398.1	405.9
135°	377.9	380.7	390.4	411.5	418.3
137.5°	399.5	399.6	406.0	425.2	432.6
140°	421.0	420.6	421.9	439.4	445.8
142.5°	439.4	440.3	438.5	453.6	459.1
145°	457.3	457.7	458.2	465.9	470.0
147.5°	475.6	476.5	476.0	477.0	482.0
150°	492.1	492.5	492.5	492.5	492.1
152.5°	506.3	507.2	507.7	509.0	507.7
155°	522.3	522.3	521.9	523.7	521.9
157.5°	536.1	535.1	535.1	536.5	535.1
160°	548.0	547.5	547.1	548.4	546.1
162.5°	559.0	557.6	557.1	559.9	557.6
165°	568.6	567.2	566.3	569.0	567.2
167.5°	576.4	574.5	574.5	577.3	574.5
170°	582.8	580.5	581.0	583.7	580.5
172.5°	587.4	585.5	585.5	588.7	585.5
175°	591.5	589.2	588.7	592.0	588.7
177.5°	593.3	591.0	591.0	594.2	590.6
180°	592.4	592.4	592.4	592.4	592.4

(END OF REPORT)