

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: P1029678

Luminaire Tested: S122DIW-B675D435UB2750-4F0-XX-W2A-F1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029678
REPORT IS A COMBINATION OF REPORTS P986590 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B675D435UB2750-4F0-XX-W2A-F1_4000K
Description: Define 2 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

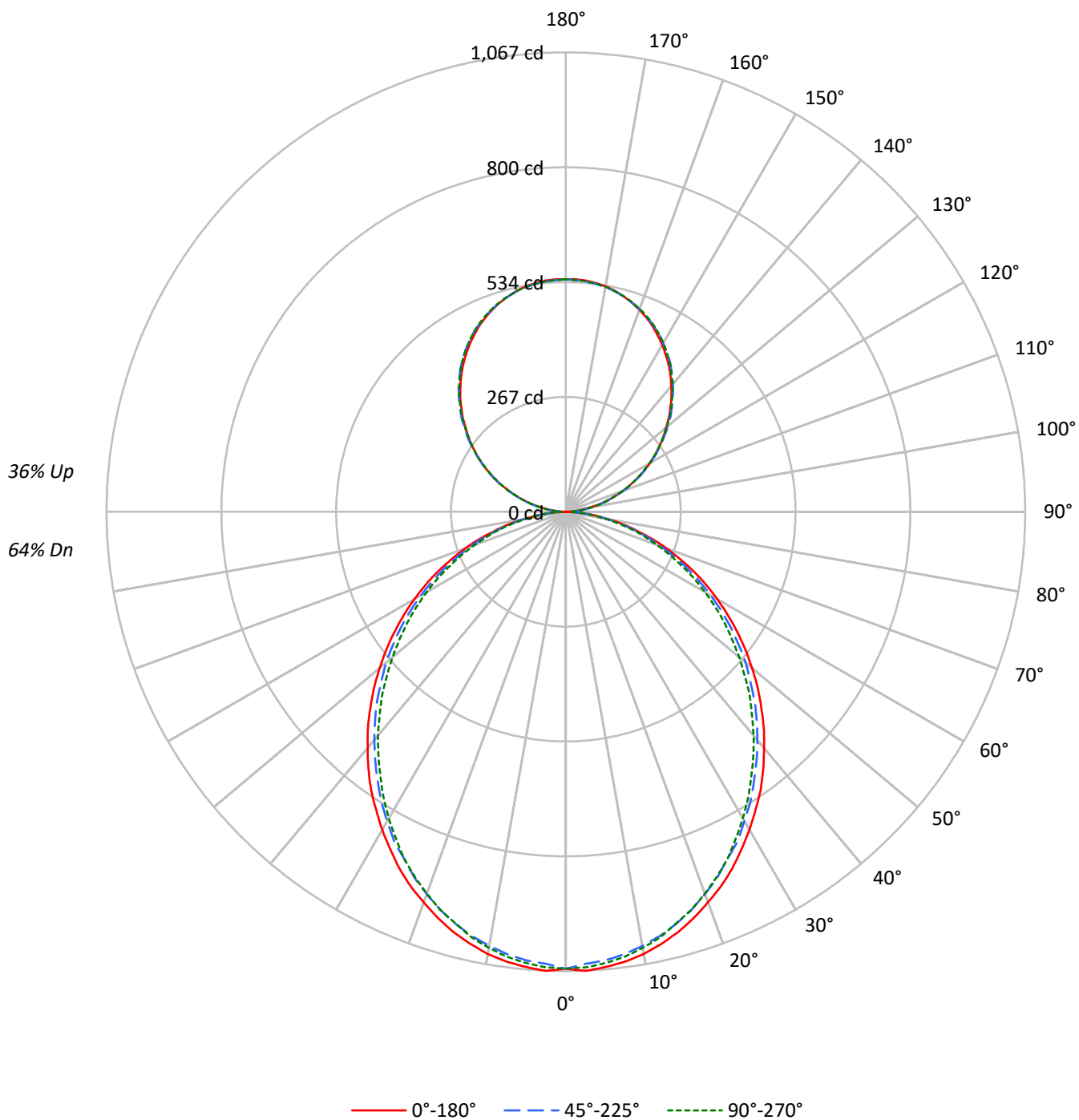
Lumens per Lamp: N/A
Luminaire Lumens: 4211.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
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			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	111	111	111	111	104	104	104	104	91	91	91		80	80	80		69	69	69	64
1	101	97	93	89	95	91	87	84	80	77	75		70	68	66		61	60	58	54
2	92	84	78	73	86	79	74	69	70	66	62		62	58	56		54	51	49	45
3	84	74	67	61	78	70	63	58	62	57	52		55	50	47		48	45	42	38
4	77	66	58	51	72	62	55	49	55	49	45		49	44	40		43	39	36	33
5	71	59	50	44	66	55	48	42	49	43	39		44	39	35		38	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34		40	35	31		35	31	28	25
7	60	48	40	34	56	45	38	32	40	34	30		36	31	27		32	28	25	22
8	56	43	35	30	53	41	34	29	37	31	27		33	28	24		29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24		30	26	22		27	23	20	18
10	49	37	29	24	46	35	28	23	31	26	22		28	23	20		25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16800	16800	16800
5°	16827	16012	15899
10°	16689	15283	14979
15°	16445	14547	14012
20°	16114	13747	13096
25°	15785	12913	12182
30°	15371	12127	11222
35°	14981	11300	10279
40°	14497	10483	9388
45°	14019	9672	8515
50°	13494	8847	7608
55°	12942	7966	6749
60°	12323	7011	5857
65°	11646	6040	4917
70°	10783	4978	3972
75°	9588	3838	3066
80°	8143	2609	1974
85°	5905	1214	839

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14019 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	2.4
10°-20°	281.0	6.7
20°-30°	413.0	9.8
30°-40°	479.7	11.4
40°-50°	479.1	11.4
50°-60°	417.7	9.9
60°-70°	308.8	7.3
70°-80°	174.7	4.1
80°-90°	47.6	1.1
90°-100°	33.4	0.8
100°-110°	106.2	2.5
110°-120°	181.7	4.3
120°-130°	238.9	5.7
130°-140°	268.2	6.4
140°-150°	263.0	6.2
150°-160°	220.6	5.2
160°-170°	146.3	3.5
170°-180°	51.1	1.2
0°-30°	793.9	18.9
0°-40°	1273.6	30.2
0°-60°	2170.4	51.5
0°-90°	2701.5	64.2
90°-120°	321.2	7.6
90°-150°	1091.4	25.9
90°-180°	1509.0	35.8
0°-180°	4211.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1061	1057	1046	1054	1052	101
15°	1010	1004	991	995	990	285
25°	914	906	889	891	889	421
35°	789	779	762	756	751	493
45°	642	635	619	608	604	495
55°	486	480	467	455	450	434
65°	328	321	311	302	297	324
75°	171	169	164	158	160	183
85°	42	41	40	37	36	47
90°	0	6	16	15	16	4
95°	24	28	29	29	28	26
105°	98	99	100	101	101	103
115°	182	185	184	184	182	180
125°	265	269	268	266	266	237
135°	343	348	349	348	347	265
145°	416	420	422	423	421	260
155°	476	478	479	481	480	219
165°	518	518	518	521	518	146
175°	539	538	537	540	537	51
180°	540	540	540	540	540	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1061.3	1061.3	1061.3	1061.3	1061.3
2.5°	1067.4	1062.3	1051.0	1061.3	1059.2
5°	1061.3	1057.2	1045.9	1054.1	1052.1
7.5°	1054.1	1048.0	1036.8	1044.9	1042.9
10°	1042.9	1035.7	1023.5	1031.7	1028.6
12.5°	1027.6	1021.5	1009.2	1014.3	1012.3
15°	1010.2	1004.1	990.8	994.9	989.8
17.5°	988.8	982.7	969.4	974.5	969.4
20°	965.3	959.2	944.9	948.0	943.9
22.5°	941.9	932.7	919.4	919.4	917.4
25°	914.3	906.1	888.8	890.8	888.8
27.5°	883.7	876.6	863.3	860.2	855.1
30°	853.1	844.9	829.6	826.6	822.5
32.5°	820.4	814.3	798.0	791.9	787.8
35°	788.8	778.6	762.3	756.1	751.0
37.5°	753.1	743.9	727.6	720.4	715.3
40°	716.3	708.2	691.9	682.7	678.6
42.5°	680.6	672.5	656.1	645.9	639.8
45°	641.9	634.7	619.4	608.2	604.1
47.5°	604.1	597.0	580.6	569.4	563.3
50°	564.3	559.2	544.9	530.6	525.5
52.5°	525.5	518.4	505.1	493.9	486.7
55°	485.7	479.6	467.4	455.1	450.0
57.5°	445.9	440.8	427.6	415.3	411.2
60°	406.1	402.1	387.8	376.5	373.5
62.5°	367.4	360.2	350.0	339.8	335.7
65°	327.6	321.4	311.2	302.0	296.9
67.5°	286.7	281.6	272.5	265.3	261.2
70°	249.0	244.9	235.7	228.6	224.5
72.5°	210.2	206.1	201.0	193.9	190.8
75°	171.4	169.4	164.3	158.2	160.2
77.5°	136.7	132.7	130.6	127.6	124.5
80°	102.0	101.0	99.0	95.9	93.9
82.5°	69.4	69.4	68.4	64.3	64.3
85°	41.8	40.8	39.8	36.7	35.7
87.5°	18.4	16.3	14.3	11.2	10.2
90°	0.5	5.9	15.9	15.0	15.5
92.5°	10.0	13.7	14.1	14.6	14.6
95°	23.7	28.2	29.2	29.2	28.2
97.5°	39.6	43.7	45.6	45.6	45.6
100°	57.9	61.5	62.9	62.9	62.4
102.5°	77.0	79.7	81.6	82.0	81.6
105°	98.0	99.3	100.2	101.1	101.1
107.5°	118.9	120.7	120.7	121.2	118.9
110°	139.0	141.7	141.7	141.7	140.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	160.8	163.6	163.1	161.7	160.8
115°	182.2	185.0	184.1	183.6	182.2
117.5°	203.7	207.3	205.0	203.7	202.3
120°	225.1	228.7	225.1	225.1	223.7
122.5°	244.7	249.2	246.9	245.6	244.7
125°	265.2	269.3	267.9	266.5	266.1
127.5°	285.2	290.2	288.4	286.6	285.2
130°	303.9	309.8	308.9	308.0	306.2
132.5°	324.9	329.4	329.9	327.6	326.2
135°	343.1	348.1	349.0	348.5	347.2
137.5°	363.1	367.2	368.1	367.7	365.9
140°	380.9	385.0	387.3	387.3	385.4
142.5°	399.1	403.2	404.6	405.0	403.2
145°	416.4	419.6	422.4	422.8	421.0
147.5°	431.9	436.0	437.8	438.8	436.9
150°	447.9	450.6	452.4	453.8	452.4
152.5°	462.0	464.7	467.0	468.8	467.0
155°	476.1	477.5	478.8	481.1	479.8
157.5°	488.4	489.3	490.2	493.4	491.2
160°	499.4	500.3	500.7	503.5	501.6
162.5°	509.4	509.4	509.8	513.0	510.7
165°	518.0	517.6	517.6	520.8	518.5
167.5°	525.8	524.4	524.4	527.6	525.3
170°	531.7	530.3	529.9	533.1	530.3
172.5°	535.8	534.4	534.0	537.2	534.4
175°	539.0	537.6	536.7	539.9	537.2
177.5°	540.8	539.4	538.5	541.3	538.5
180°	539.9	539.9	539.9	539.9	539.9

(END OF REPORT)