

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: P1029237

Luminaire Tested: S122DIW-B1005D435UB2750-4F0-XX-W2A-F1_4000K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029237
REPORT IS A COMBINATION OF REPORTS P985240 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIW-B1005D435UB2750-4F0-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

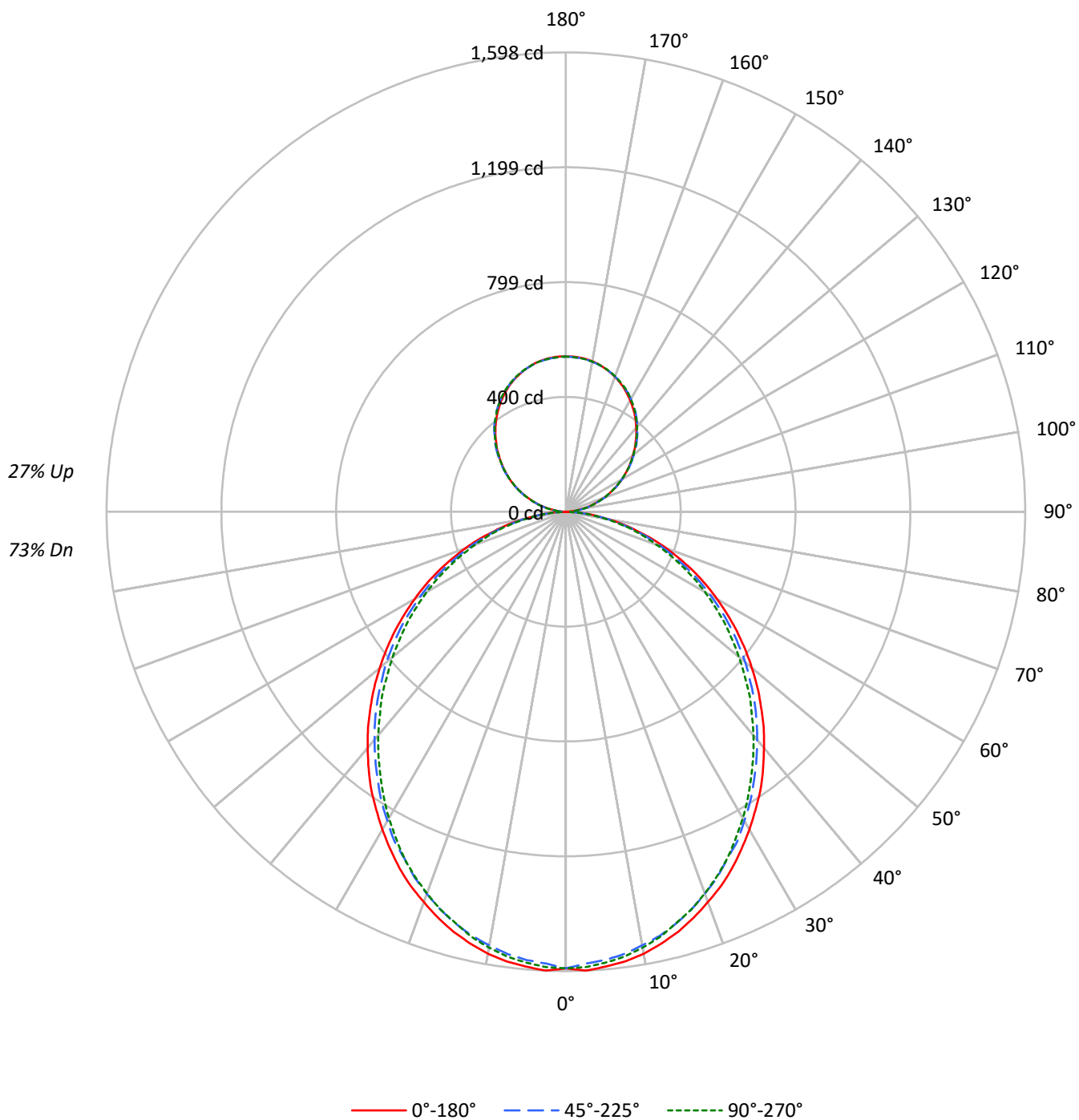
Lumens per Lamp: N/A
Luminaire Lumens: 5552.0 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77
1	103	98	94	91	97	94	90	87	84	82	79	76	74	72	68	67	65
2	94	86	80	74	89	82	76	71	74	69	66	67	63	60	60	57	55
3	86	76	68	62	81	72	65	60	65	60	55	59	55	51	53	50	47
4	78	67	59	53	74	64	57	51	58	52	47	53	48	44	48	44	40
5	72	60	51	45	68	57	50	44	52	46	41	47	42	38	43	39	35
6	67	54	45	39	63	52	44	38	47	41	36	43	38	33	39	35	31
7	62	49	41	35	58	47	39	34	43	36	32	39	34	30	36	31	28
8	57	44	36	31	54	43	35	30	39	33	28	36	30	27	33	28	25
9	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22
10	50	38	30	25	48	36	29	24	33	27	23	31	25	22	28	24	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25142	25142	25142
5°	25183	23965	23795
10°	24979	22873	22420
15°	24613	21773	20971
20°	24118	20575	19601
25°	23625	19325	18232
30°	23005	18152	16796
35°	22421	16912	15385
40°	21698	15689	14051
45°	20979	14475	12743
50°	20197	13242	11386
55°	19372	11922	10101
60°	18443	10493	8766
65°	17426	9040	7360
70°	16136	7451	5944
75°	14354	5744	4590
80°	12191	3903	2954
85°	8843	1817	1258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 20979 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.5	2.7
10°-20°	420.6	7.6
20°-30°	618.1	11.1
30°-40°	717.9	12.9
40°-50°	717.0	12.9
50°-60°	625.2	11.3
60°-70°	462.2	8.3
70°-80°	261.5	4.7
80°-90°	70.5	1.3
90°-100°	33.4	0.6
100°-110°	106.2	1.9
110°-120°	181.7	3.3
120°-130°	238.9	4.3
130°-140°	268.2	4.8
140°-150°	263.0	4.7
150°-160°	220.6	4.0
160°-170°	146.3	2.6
170°-180°	51.1	0.9
0°-30°	1188.2	21.4
0°-40°	1906.1	34.3
0°-60°	3248.3	58.5
0°-90°	4042.5	72.8
90°-120°	321.2	5.8
90°-150°	1091.4	19.7
90°-180°	1509.0	27.2
0°-180°	5552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1588	1588	1588	1588	1588	
5°	1588	1582	1565	1578	1575	151
15°	1512	1503	1483	1489	1481	426
25°	1368	1356	1330	1333	1330	630
35°	1181	1165	1141	1132	1124	737
45°	961	950	927	910	904	741
55°	727	718	700	681	674	650
65°	490	481	466	452	444	485
75°	257	254	246	237	240	274
85°	63	61	60	55	54	70
90°	0	6	16	15	16	5
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°	1588.3	1588.3	1588.3	1588.3	1588.3
2.5°	1597.5	1589.9	1573.1	1588.3	1585.3
5°	1588.3	1582.2	1565.4	1577.7	1574.6
7.5°	1577.7	1568.5	1551.7	1563.9	1560.9
10°	1560.9	1550.2	1531.8	1544.1	1539.5
12.5°	1537.9	1528.8	1510.5	1518.1	1515.0
15°	1512.0	1502.8	1483.0	1489.1	1481.4
17.5°	1479.9	1470.7	1450.9	1458.5	1450.9
20°	1444.8	1435.6	1414.2	1418.8	1412.7
22.5°	1409.7	1395.9	1376.1	1376.1	1373.0
25°	1368.4	1356.2	1330.2	1333.3	1330.2
27.5°	1322.6	1311.9	1292.1	1287.5	1279.8
30°	1276.8	1264.6	1241.7	1237.1	1231.0
32.5°	1227.9	1218.7	1194.3	1185.1	1179.0
35°	1180.6	1165.3	1140.9	1131.7	1124.1
37.5°	1127.1	1113.4	1088.9	1078.2	1070.6
40°	1072.1	1059.9	1035.5	1021.7	1015.6
42.5°	1018.7	1006.5	982.0	966.8	957.6
45°	960.6	950.0	927.0	910.2	904.1
47.5°	904.1	893.4	869.0	852.2	843.0
50°	844.6	836.9	815.6	794.2	786.5
52.5°	786.5	775.8	756.0	739.2	728.5
55°	727.0	717.8	699.5	681.2	673.5
57.5°	667.4	659.8	639.9	621.6	615.5
60°	607.8	601.7	580.4	563.6	559.0
62.5°	549.8	539.1	523.8	508.6	502.5
65°	490.2	481.1	465.8	452.1	444.4
67.5°	429.2	421.5	407.8	397.1	391.0
70°	372.6	366.5	352.8	342.1	336.0
72.5°	314.6	308.5	300.9	290.2	285.6
75°	256.6	253.5	245.9	236.7	239.8
77.5°	204.7	198.5	195.5	190.9	186.3
80°	152.7	151.2	148.1	143.6	140.5
82.5°	103.9	103.9	102.3	96.2	96.2
85°	62.6	61.1	59.6	55.0	53.5
87.5°	27.5	24.4	21.4	16.8	15.3
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)