

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: P1029231

Luminaire Tested: S122DIW-B1005D435UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1029231
REPORT IS A COMBINATION OF REPORTS P985234 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-D_3500K
Description: Define 2 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

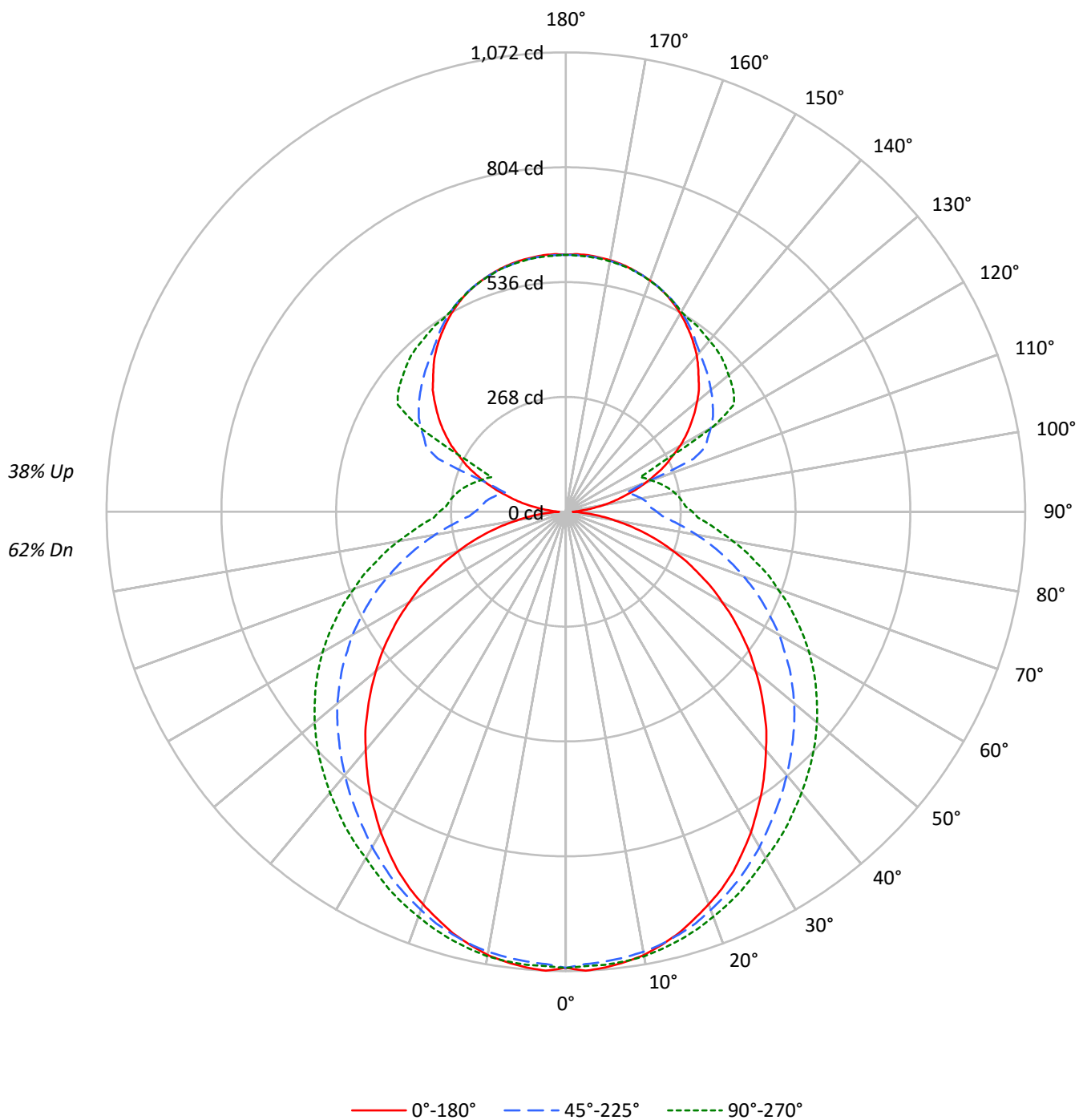
Lumens per Lamp: N/A
Luminaire Lumens: 5820.0 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	67	67	62
1	99	93	89	85	92	87	83	80	76	73	70	66	64	61	56	55	53	53	53	48
2	89	81	73	68	83	75	69	64	66	61	57	57	53	50	49	46	43	43	43	39
3	81	70	62	55	75	66	58	53	57	52	47	50	45	41	42	39	36	36	36	32
4	74	62	53	46	68	58	50	44	51	44	39	44	39	35	38	34	31	31	31	27
5	68	55	46	40	63	52	44	38	45	39	34	39	34	30	34	30	26	26	26	23
6	62	49	40	34	58	46	38	32	41	34	29	35	30	26	30	26	23	23	23	20
7	57	44	36	30	53	42	34	28	37	30	26	32	27	23	28	23	20	20	20	18
8	53	40	32	26	50	38	30	25	33	27	23	29	24	20	25	21	18	18	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	23	19	16	16	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	15	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16847	16847	16847
5°	16924	16128	16037
10°	16809	15569	15342
15°	16572	14992	14631
20°	16273	14385	13954
25°	15978	13805	13340
30°	15564	13214	12733
35°	15146	12644	12286
40°	14704	12153	11844
45°	14283	11705	11458
50°	13832	11295	11076
55°	13358	10856	10688
60°	12778	10401	10279
65°	12172	9879	9810
70°	11489	9316	9305
75°	10612	8755	8828
80°	9237	8169	8334
85°	7840	7620	7908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14283 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.7
10°-20°	289.4	5.0
20°-30°	438.5	7.5
30°-40°	533.9	9.2
40°-50°	574.5	9.9
50°-60°	557.9	9.6
60°-70°	487.2	8.4
70°-80°	375.0	6.4
80°-90°	252.2	4.3
90°-100°	193.0	3.3
100°-110°	200.2	3.4
110°-120°	279.0	4.8
120°-130°	370.8	6.4
130°-140°	363.9	6.3
140°-150°	323.4	5.6
150°-160°	257.3	4.4
160°-170°	165.8	2.8
170°-180°	57.1	1.0
0°-30°	828.7	14.2
0°-40°	1362.6	23.4
0°-60°	2495.0	42.9
0°-90°	3609.3	62.0
90°-120°	672.3	11.6
90°-150°	1730.4	29.7
90°-180°	2211.0	38.0
0°-180°	5820.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1067	1063	1054	1063	1061	101
15°	1018	1021	1021	1035	1034	287
25°	926	936	950	969	973	426
35°	798	824	853	887	898	498
45°	654	696	750	798	813	505
55°	501	557	637	693	713	448
65°	342	418	509	572	592	340
75°	190	276	375	441	461	201
85°	56	151	250	315	336	59
90°	16	110	212	276	296	12
95°	40	99	194	255	273	43
105°	140	197	159	218	237	150
115°	256	280	360	206	191	251
125°	356	362	419	464	479	318
135°	438	445	464	501	512	339
145°	506	506	513	526	531	317
155°	558	554	559	562	558	257
165°	588	585	586	589	586	166
175°	601	598	599	602	598	57
180°	600	600	600	600	600	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1064.3	1064.3	1064.3	1064.3	1064.3
2.5°	1072.0	1067.4	1056.6	1064.3	1061.2
5°	1067.4	1062.8	1053.5	1062.8	1061.2
7.5°	1059.7	1056.6	1048.9	1059.7	1058.1
10°	1050.4	1047.3	1042.7	1055.0	1053.5
12.5°	1035.0	1036.5	1033.5	1045.8	1044.2
15°	1018.0	1021.1	1021.1	1035.0	1033.5
17.5°	996.4	1002.6	1007.2	1021.1	1021.1
20°	974.8	982.6	988.7	1005.7	1005.7
22.5°	951.7	961.0	970.2	987.2	990.3
25°	925.5	936.3	950.2	968.7	973.3
27.5°	894.6	911.6	927.0	950.2	953.2
30°	863.8	883.8	903.9	928.6	933.2
32.5°	829.8	853.0	877.7	907.0	916.2
35°	797.5	823.7	853.0	886.9	897.7
37.5°	762.0	791.3	828.3	865.3	876.1
40°	726.5	760.4	802.1	842.2	856.1
42.5°	692.6	726.5	775.9	820.6	834.5
45°	654.0	695.7	749.6	797.5	812.9
47.5°	617.0	661.7	723.4	772.8	789.7
50°	578.4	626.2	695.7	748.1	765.1
52.5°	541.4	592.3	666.3	720.3	738.8
55°	501.3	556.8	637.0	692.6	712.6
57.5°	462.7	524.4	604.6	664.8	684.9
60°	421.1	487.4	575.3	634.0	655.5
62.5°	384.1	453.5	541.4	604.6	624.7
65°	342.4	418.0	509.0	572.3	592.3
67.5°	305.4	384.1	476.6	539.9	561.5
70°	265.3	345.5	441.1	507.5	526.0
72.5°	228.3	311.6	408.8	473.5	496.7
75°	189.7	276.1	374.8	441.1	461.2
77.5°	152.7	242.2	342.4	408.8	430.3
80°	115.7	209.8	310.0	374.8	396.4
82.5°	84.8	177.4	279.2	344.0	364.0
85°	55.5	151.2	249.9	314.7	336.3
87.5°	33.9	126.5	225.2	288.4	308.5
90°	15.8	110.1	212.3	276.1	295.5
92.5°	24.7	104.7	200.1	261.2	280.1
95°	40.5	98.7	194.3	255.1	273.2
97.5°	61.6	92.3	188.7	247.1	266.1
100°	87.6	85.3	178.9	239.5	257.4
102.5°	114.7	164.8	169.0	229.4	247.6
105°	139.6	197.3	159.2	217.8	236.6
107.5°	170.4	218.3	149.2	206.4	225.1
110°	198.4	238.3	188.5	194.5	213.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.2	258.6	322.2	184.6	202.8
115°	255.7	280.0	360.2	205.6	191.4
117.5°	279.7	300.8	372.9	357.1	258.8
120°	308.3	321.0	390.5	439.0	397.4
122.5°	332.6	341.2	406.8	451.1	465.5
125°	355.9	361.5	419.0	463.8	479.0
127.5°	378.4	382.9	431.1	474.0	488.3
130°	399.7	405.0	442.2	484.1	495.9
132.5°	421.4	425.4	453.4	492.8	504.7
135°	438.0	444.9	464.3	501.1	512.5
137.5°	457.1	462.3	474.4	508.1	517.6
140°	475.7	477.7	485.6	514.2	521.2
142.5°	491.4	492.9	498.5	520.5	526.0
145°	506.4	505.9	513.3	525.6	531.2
147.5°	520.7	519.4	526.7	530.4	533.4
150°	534.6	531.5	538.5	541.1	538.9
152.5°	546.3	542.8	549.3	551.9	548.9
155°	557.6	553.7	558.9	561.5	558.0
157.5°	566.7	563.2	567.1	570.1	566.7
160°	574.5	571.9	574.5	577.1	574.0
162.5°	581.4	578.8	581.0	584.0	580.1
165°	587.5	584.9	586.2	589.2	586.2
167.5°	592.3	589.7	591.0	594.0	590.1
170°	596.2	593.6	594.4	597.5	593.6
172.5°	598.8	596.2	597.0	600.1	596.2
175°	600.9	597.9	598.8	601.8	597.5
177.5°	601.8	598.8	599.2	602.2	598.3
180°	599.6	599.6	599.6	599.6	599.6

(END OF REPORT)