

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: P1031882

Luminaire Tested: S123DIW-B775D1320UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031882
REPORT IS A COMBINATION OF REPORTS P991948 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

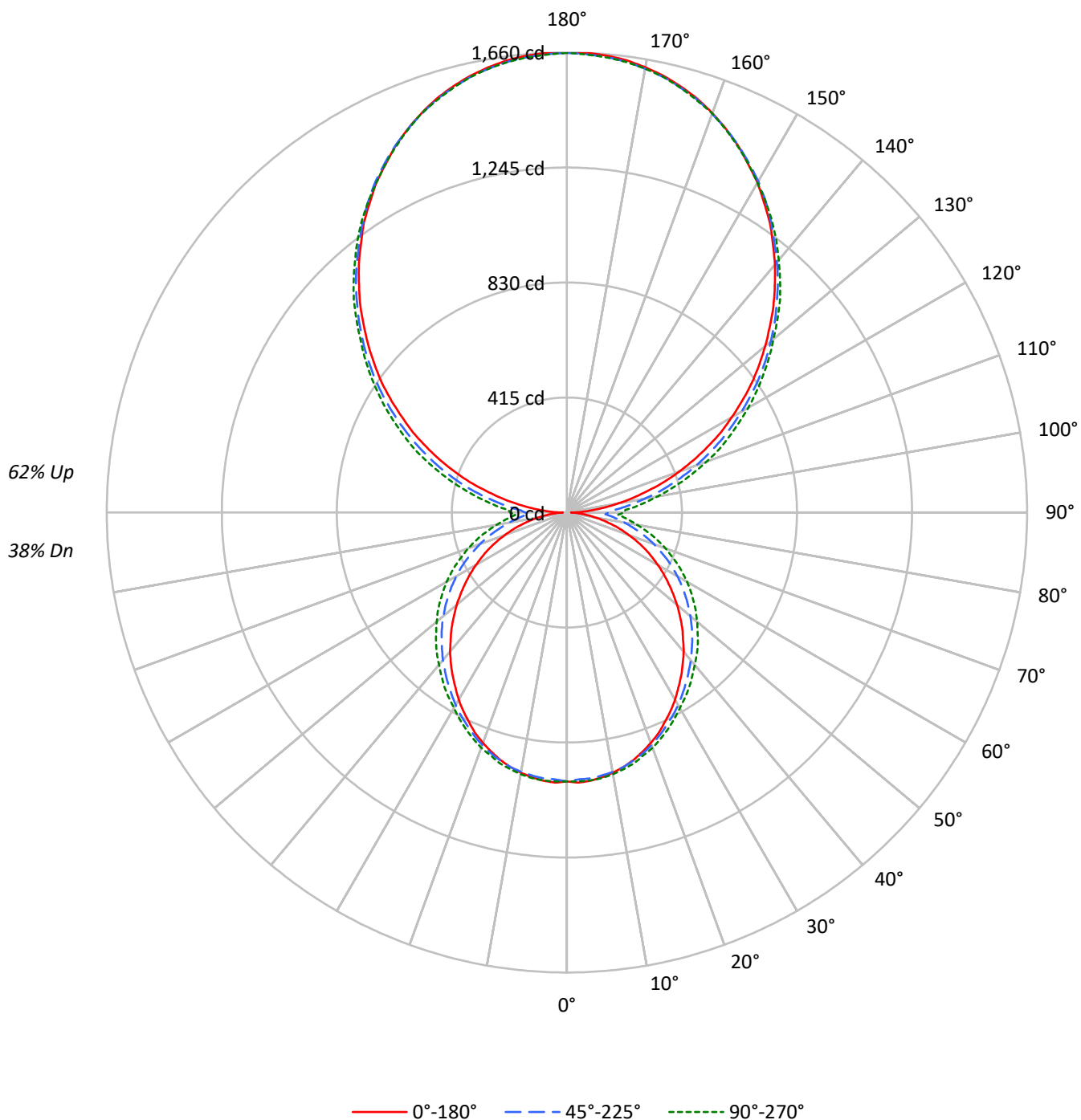
Lumens per Lamp: N/A
Luminaire Lumens: 7861.0 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45
1	94	90	86	82	85	81	78	75	66	63	61	52	50	48	39	38	36
2	86	78	72	66	77	71	65	61	57	53	50	45	42	40	33	32	30
3	78	68	61	55	70	62	55	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	24	22
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	23	21	19
6	60	48	40	34	54	43	36	31	36	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	19	17	14
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	18	15	13
9	48	35	28	23	43	32	26	21	27	22	18	21	17	15	16	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10444	10444	10444
5°	10473	10138	10130
10°	10375	9863	9788
15°	10238	9560	9426
20°	10043	9222	9036
25°	9803	8842	8633
30°	9558	8496	8228
35°	9281	8135	7899
40°	9019	7805	7550
45°	8728	7485	7263
50°	8440	7167	6951
55°	8121	6842	6666
60°	7808	6510	6371
65°	7487	6155	6028
70°	7003	5758	5674
75°	6394	5305	5309
80°	5679	4846	4891
85°	4976	4475	4593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8728 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	1.2
10°-20°	262.4	3.3
20°-30°	392.4	5.0
30°-40°	468.5	6.0
40°-50°	490.2	6.2
50°-60°	460.0	5.9
60°-70°	384.2	4.9
70°-80°	274.7	3.5
80°-90°	167.0	2.1
90°-100°	209.5	2.7
100°-110°	398.7	5.1
110°-120°	600.6	7.6
120°-130°	752.6	9.6
130°-140°	826.6	10.5
140°-150°	802.6	10.2
150°-160°	673.5	8.6
160°-170°	448.3	5.7
170°-180°	157.0	2.0
0°-30°	746.8	9.5
0°-40°	1215.3	15.5
0°-60°	2165.5	27.5
0°-90°	2991.5	38.1
90°-120°	1208.9	15.4
90°-150°	3590.7	45.7
90°-180°	4870.0	62.0
0°-180°	7861.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	971	969	963	971	970	92
15°	925	928	927	938	936	261
25°	835	846	849	862	862	385
35°	719	736	749	765	770	449
45°	588	613	640	660	668	453
55°	448	483	521	550	558	401
65°	310	351	397	429	440	306
75°	168	218	271	306	318	180
85°	52	105	161	197	207	53
90°	15	80	151	192	205	16
95°	88	139	201	239	250	94
105°	302	330	387	416	428	322
115°	559	576	611	638	645	554
125°	814	818	846	863	865	726
135°	1054	1061	1071	1085	1087	812
145°	1277	1278	1282	1290	1288	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.3	970.3	970.3	970.3	970.3
2.5°	975.6	972.4	964.0	972.4	971.4
5°	971.4	969.3	962.9	971.4	970.3
7.5°	964.0	964.0	957.6	968.2	967.1
10°	953.4	955.5	950.2	960.8	958.7
12.5°	940.7	943.9	940.7	950.2	948.1
15°	924.9	928.0	927.0	937.5	936.5
17.5°	905.8	912.2	911.1	920.6	918.5
20°	884.7	891.0	893.1	902.7	903.7
22.5°	862.5	868.8	872.0	884.7	883.6
25°	835.0	845.6	848.8	862.5	862.5
27.5°	808.6	820.2	826.6	838.2	839.2
30°	780.1	793.8	802.2	814.9	814.9
32.5°	748.3	764.2	775.8	789.6	792.7
35°	718.7	735.7	749.4	765.3	769.5
37.5°	687.0	706.1	721.9	739.9	743.1
40°	655.3	674.4	695.5	713.5	717.7
42.5°	620.4	644.8	667.0	687.0	693.4
45°	587.7	613.0	639.5	659.6	668.0
47.5°	552.8	581.3	610.9	633.1	639.5
50°	519.0	548.6	581.3	605.7	613.0
52.5°	483.0	514.8	551.7	577.1	586.6
55°	448.2	483.0	521.1	549.6	558.1
57.5°	414.3	450.3	491.5	520.0	529.5
60°	378.4	416.5	459.8	489.4	501.0
62.5°	344.6	383.7	430.2	459.8	470.4
65°	309.7	350.9	397.4	429.1	439.7
67.5°	274.8	318.2	364.7	399.5	408.0
70°	237.8	283.3	334.0	367.8	378.4
72.5°	204.0	249.4	302.3	337.2	347.7
75°	168.1	217.7	270.6	305.5	318.2
77.5°	137.4	187.1	239.9	276.9	286.4
80°	104.6	156.4	211.4	247.3	257.9
82.5°	76.1	129.0	185.0	220.9	231.5
85°	51.8	104.6	160.7	196.6	207.2
87.5°	31.7	84.6	138.5	174.4	185.0
90°	15.0	79.8	150.7	191.9	205.0
92.5°	51.8	105.0	165.7	204.5	211.4
95°	88.5	138.8	201.0	239.0	249.6
97.5°	137.0	181.5	239.0	277.3	286.6
100°	186.7	228.3	283.6	318.1	331.3
102.5°	244.4	277.9	334.5	368.0	377.3
105°	301.7	329.6	386.8	416.4	428.5
107.5°	368.4	391.9	440.4	472.9	481.1
110°	429.8	451.5	496.3	529.0	534.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	495.0	511.1	551.3	584.2	593.7
115°	559.1	575.7	611.1	637.8	644.9
117.5°	625.6	635.3	668.7	694.0	698.6
120°	685.7	698.9	727.2	750.2	755.0
122.5°	749.6	756.9	787.1	806.5	810.0
125°	813.8	817.7	845.7	862.6	864.8
127.5°	873.7	880.4	904.2	917.6	919.8
130°	933.6	943.0	960.3	975.0	972.3
132.5°	992.5	1002.9	1016.2	1028.7	1029.6
135°	1053.7	1060.6	1070.8	1084.6	1087.3
137.5°	1109.8	1115.3	1126.6	1137.0	1138.4
140°	1167.4	1173.9	1178.3	1192.9	1189.1
142.5°	1220.8	1226.3	1228.9	1241.3	1240.0
145°	1276.9	1278.4	1282.3	1289.5	1288.5
147.5°	1324.0	1329.2	1333.1	1336.3	1332.7
150°	1374.8	1377.4	1380.0	1380.0	1374.3
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)