

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: P1031939

Luminaire Tested: S123DIW-B775D460UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031939
REPORT IS A COMBINATION OF REPORTS P992080 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D460UB35-4F0-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

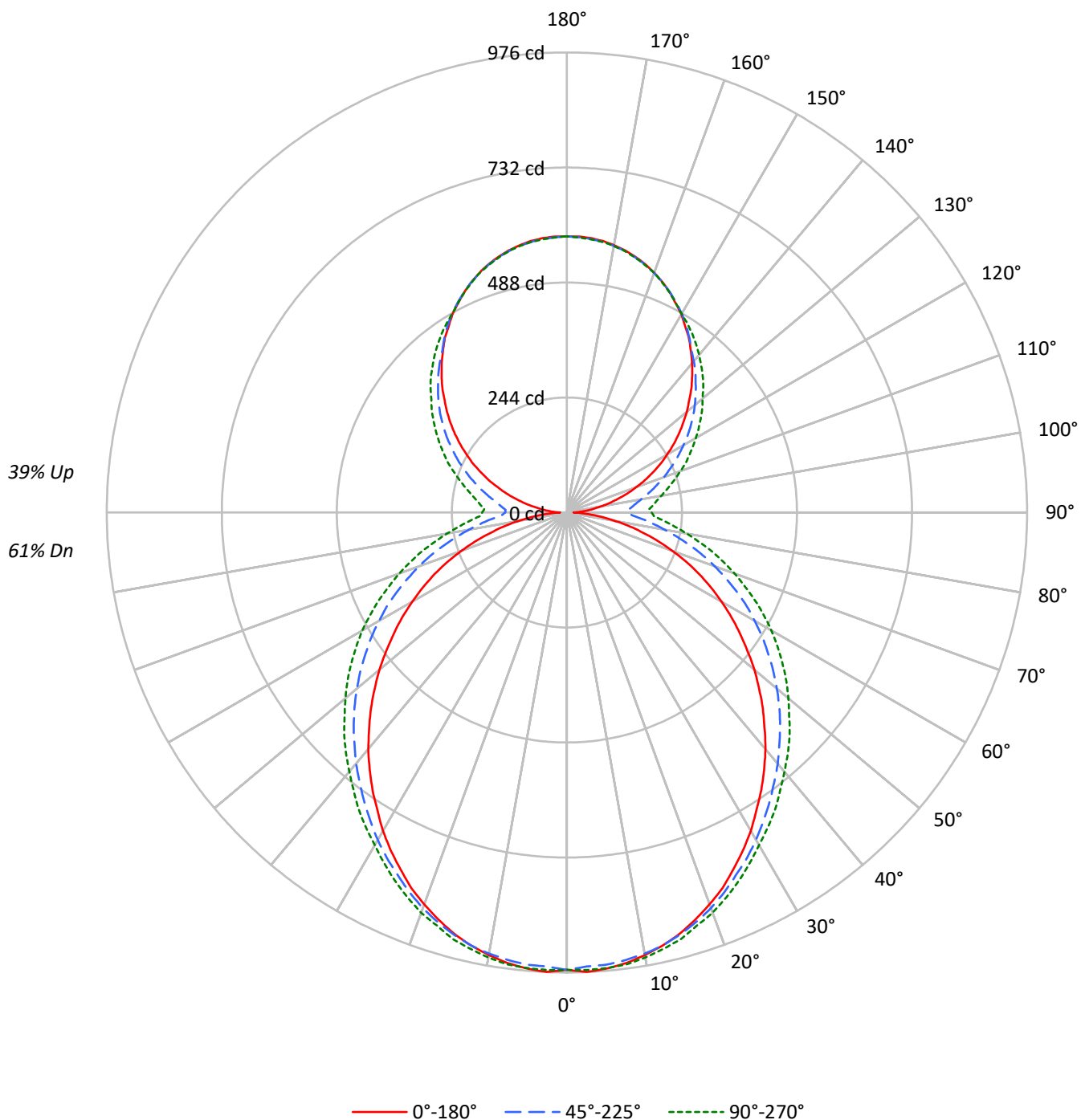
Lumens per Lamp: N/A
Luminaire Lumens: 4885.0 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
RW	70	50	30	10	70	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	77	77	77	66	66	66
1	99	94	90	86	92	88	84	81	77	74	71	66	64	62	57	55	54
2	90	81	75	69	83	76	70	65	66	62	58	57	54	51	49	46	44
3	81	71	63	57	76	67	60	54	58	53	48	50	46	42	43	40	37
4	74	63	54	48	69	59	51	45	52	45	41	45	40	36	38	35	32
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	34	30	27
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24
7	58	45	37	31	54	43	35	29	38	31	27	33	28	24	28	24	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	32	26	21	29	23	19	26	21	17	22	18	15

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	1.9
10°-20°	262.4	5.4
20°-30°	392.4	8.0
30°-40°	468.5	9.6
40°-50°	490.2	10.0
50°-60°	460.0	9.4
60°-70°	384.2	7.9
70°-80°	274.7	5.6
80°-90°	164.7	3.4
90°-100°	140.4	2.9
100°-110°	189.6	3.9
110°-120°	244.7	5.0
120°-130°	284.3	5.8
130°-140°	300.2	6.1
140°-150°	285.1	5.8
150°-160°	237.8	4.9
160°-170°	158.3	3.2
170°-180°	55.4	1.1
0°-30°	746.8	15.3
0°-40°	1215.3	24.9
0°-60°	2165.5	44.3
0°-90°	2989.2	61.2
90°-120°	574.7	11.8
90°-150°	1444.3	29.6
90°-180°	1896.0	38.8
0°-180°	4885.0	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°	14	71	130	168	180	12
95°	39	83	139	173	184	39
105°	112	138	188	218	228	119
115°	201	215	252	278	286	199
125°	289	291	320	341	346	258
135°	373	375	386	403	408	288
145°	452	451	453	461	463	282
155°	516	516	516	518	515	237
165°	562	560	560	563	560	158
175°	584	582	582	585	582	56
180°	586	586	586	586	586	

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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°	14.2	70.6	130.4	168.3	179.7
92.5°	26.5	74.7	130.3	166.6	175.2
95°	38.7	83.2	138.6	173.3	183.9
97.5°	55.2	95.5	148.0	182.0	192.1
100°	72.1	108.6	159.6	191.6	203.1
102.5°	91.8	122.8	173.5	204.5	214.6
105°	112.0	138.2	187.9	217.5	227.9
107.5°	134.8	157.5	202.6	232.6	241.7
110°	155.8	175.8	219.0	248.3	255.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.8	194.1	234.3	263.0	272.5
115°	200.8	214.9	252.0	277.8	285.8
117.5°	224.3	233.2	268.2	293.5	300.7
120°	244.8	252.9	285.5	309.3	315.8
122.5°	267.4	271.3	303.2	325.1	331.1
125°	289.4	290.7	320.4	340.8	346.3
127.5°	310.5	312.2	337.7	356.1	361.7
130°	331.7	334.3	354.1	372.2	375.4
132.5°	351.7	355.4	370.4	387.1	392.2
135°	373.4	375.1	386.3	403.4	407.8
137.5°	393.2	394.5	403.2	417.8	421.8
140°	412.9	415.2	418.7	434.2	436.2
142.5°	431.7	432.9	433.8	447.1	450.1
145°	451.5	451.3	452.7	460.7	463.1
147.5°	467.4	469.3	470.6	473.8	475.3
150°	485.4	486.3	487.2	487.2	486.5
152.5°	500.1	501.5	501.9	502.9	500.5
155°	515.7	515.7	516.2	518.0	514.8
157.5°	529.1	528.6	529.1	530.9	528.2
160°	541.5	540.6	540.6	542.9	541.0
162.5°	552.5	551.2	551.6	553.9	550.7
165°	561.7	560.4	560.4	563.1	559.9
167.5°	569.6	567.7	568.2	570.9	568.2
170°	576.0	574.2	574.2	577.4	574.2
172.5°	581.1	579.2	579.2	582.0	578.8
175°	584.3	582.4	582.4	585.2	582.0
177.5°	586.1	584.3	584.3	587.0	583.8
180°	585.7	585.7	585.7	585.7	585.7

(END OF REPORT)