

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P857249

Luminaire Tested: **LX4C20D010 EX4C209830 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251634)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C20D010 EX4C209830 4LBSWNH
Description:
Light Source: -
Ballast/Driver: -

Summary

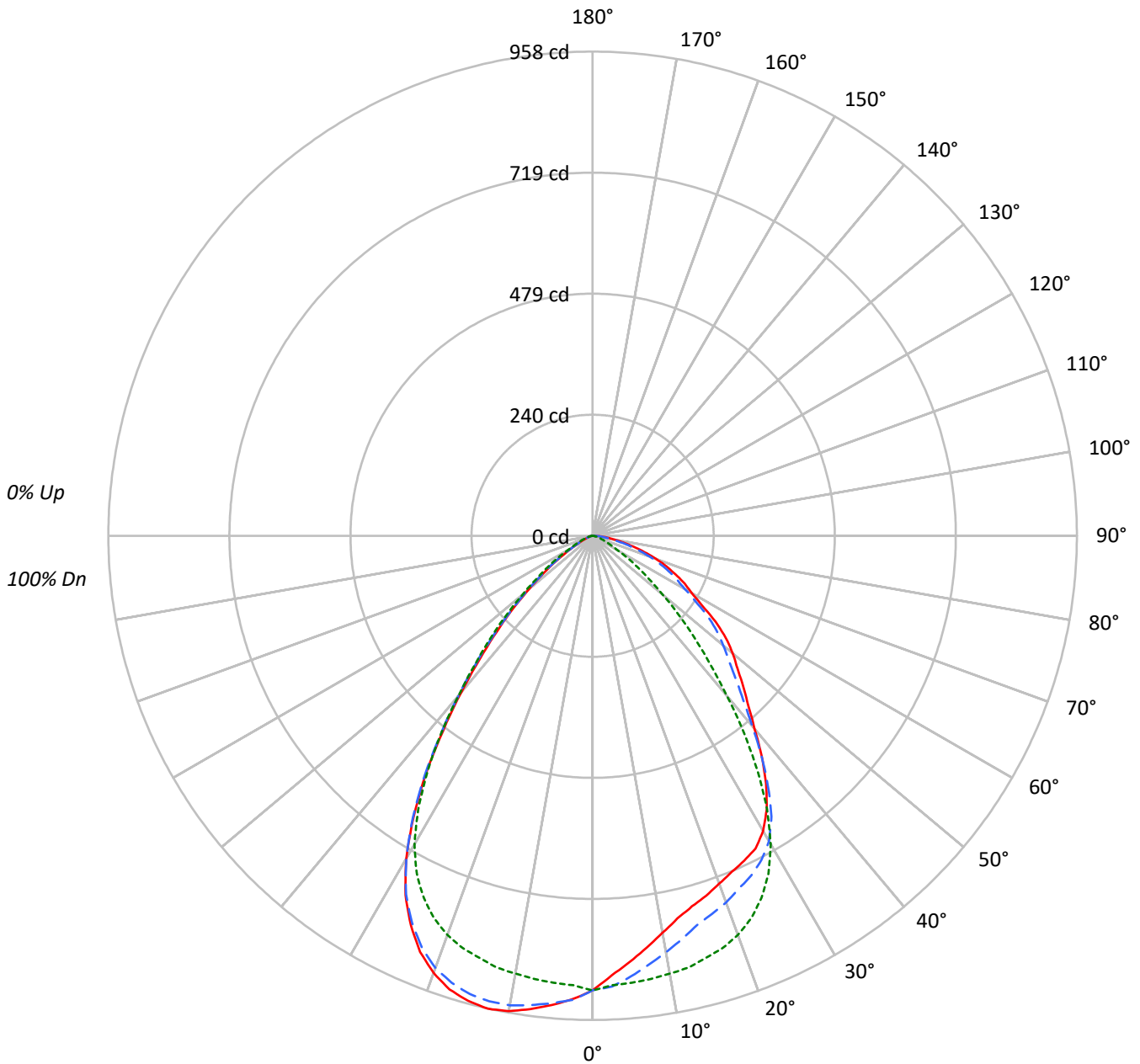
Lumens per Lamp: N/A
Luminaire Lumens: 1576.6 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
Input Voltage (V):
Input Current (A_{in}): 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: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79																			
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70																			
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62																			
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56																			
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50																			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46																			
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42																			
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38																			
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	110494	110494	110494
5°	104343	109486	114924
10°	99475	109741	119147
15°	96548	109966	121171
20°	95766	109859	120318
25°	96148	107142	115316
30°	95698	99968	104564
35°	89701	85352	86221
40°	79930	66170	64679
45°	73093	49325	46302
50°	69111	34556	31249
55°	63571	23347	19620
60°	55530	13661	10836
65°	52558	8750	6076
70°	47881	6250	3736
75°	39635	4414	2753
80°	31200	2476	1627
85°	27769	1692	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	5.4
10°-20°	243.8	15.5
20°-30°	361.4	22.9
30°-40°	361.9	23.0
40°-50°	252.9	16.0
50°-60°	150.5	9.5
60°-70°	78.6	5.0
70°-80°	34.9	2.2
80°-90°	7.6	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	690.2	43.8
0°-40°	1052.1	66.7
0°-60°	1455.5	92.3
0°-90°	1576.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1576.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	899	899	899	899	899	
5°	846	875	888	928	932	79
15°	759	797	865	939	953	215
25°	709	742	790	845	851	327
35°	598	605	569	580	575	371
45°	421	400	284	275	266	327
55°	297	278	109	95	92	263
65°	181	166	30	22	21	179
75°	84	73	9	6	6	90
85°	20	15	1	1	0	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4
2.5°	870.4	880.9	870.4	873.9	887.8	875.1	882.0	882.0	878.5	886.7	892.5
5°	846.1	856.5	846.1	850.7	865.8	853.0	861.2	858.8	860.0	867.0	875.1
7.5°	821.7	829.9	820.6	826.4	840.3	829.9	836.8	836.8	838.0	848.4	855.4
10°	797.4	804.4	797.4	802.0	817.1	807.9	812.5	813.6	817.1	826.4	836.8
12.5°	775.4	781.2	774.2	781.2	793.9	784.6	790.4	791.6	795.1	805.6	817.1
15°	759.1	765.0	758.1	763.8	775.4	768.4	773.1	775.4	777.7	787.0	797.4
17.5°	746.5	751.1	745.2	752.2	761.5	753.4	760.4	760.4	763.8	773.1	784.6
20°	732.5	737.1	732.5	738.3	748.8	741.8	747.5	747.5	751.1	761.5	772.0
22.5°	719.8	722.1	719.8	724.5	734.8	729.1	732.5	733.7	737.1	746.5	755.8
25°	709.3	713.9	711.6	716.2	723.2	717.5	720.9	722.1	725.5	733.7	741.8
27.5°	697.7	700.0	697.7	703.6	709.3	704.7	708.2	707.0	709.3	716.2	723.2
30°	674.6	676.9	676.9	680.3	685.0	682.7	686.2	682.7	685.0	690.8	697.7
32.5°	641.0	642.1	643.3	646.8	650.3	646.8	649.1	649.1	649.1	653.7	658.4
35°	598.1	600.4	599.3	601.6	605.0	603.9	603.9	602.7	600.4	602.7	605.0
37.5°	549.4	545.9	545.9	549.4	551.7	547.1	549.4	547.1	547.1	548.2	548.2
40°	498.4	494.9	498.4	499.6	500.7	498.4	497.2	494.9	491.4	492.6	490.3
42.5°	455.5	453.2	454.3	454.3	455.5	453.2	454.3	449.7	446.2	443.9	440.4
45°	420.7	417.2	420.7	418.4	418.4	417.2	416.1	413.8	409.1	405.7	399.9
47.5°	388.3	388.3	389.4	389.4	389.4	387.1	387.1	382.5	377.8	373.2	365.1
50°	361.6	359.3	363.9	363.9	360.4	359.3	360.4	354.6	351.2	345.4	337.3
52.5°	332.6	332.6	333.8	333.8	332.6	330.3	331.5	326.8	323.3	317.5	309.4
55°	296.8	294.5	297.8	297.8	296.8	295.5	296.8	293.2	289.8	285.2	278.1
57.5°	256.2	254.9	257.3	258.5	256.2	256.2	257.3	253.9	252.6	248.0	241.0
60°	226.0	224.9	227.2	228.4	226.0	226.0	226.0	221.3	219.0	214.4	209.7
62.5°	205.1	204.0	206.3	205.1	204.0	202.8	204.0	199.4	197.1	192.4	187.8
65°	180.8	182.0	183.2	183.2	182.0	180.8	180.8	178.5	176.2	171.6	165.8
67.5°	157.6	157.6	158.8	159.9	158.8	158.8	158.8	155.3	153.0	149.5	142.6
70°	133.3	132.2	135.6	135.6	133.3	134.5	133.3	132.2	129.8	125.2	119.4
72.5°	107.8	107.8	109.0	109.0	107.8	107.8	107.8	106.7	103.2	100.9	95.1
75°	83.5	83.5	84.6	85.8	83.5	83.5	84.6	82.3	80.0	76.5	73.0
77.5°	62.6	61.4	62.6	62.6	61.4	61.4	61.4	60.3	59.1	55.6	52.2
80°	44.1	42.9	44.1	44.1	44.1	42.9	42.9	41.7	41.7	39.4	35.9
82.5°	30.1	29.0	30.1	30.1	30.1	29.0	29.0	29.0	27.8	26.7	24.3
85°	19.7	18.5	18.5	19.7	18.5	18.5	18.5	18.5	17.4	16.2	15.1
87.5°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	8.1	8.1	8.1	7.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4
2.5°	887.8	885.5	892.5	890.1	891.3	885.5	894.8	890.1	895.9	890.1	901.7
5°	872.7	870.4	880.9	879.7	880.9	876.2	886.7	885.5	892.5	887.8	900.6
7.5°	856.5	854.2	865.8	867.0	869.3	864.6	878.5	878.5	885.5	884.3	898.3
10°	838.0	839.1	850.7	853.0	857.7	855.4	868.1	871.6	880.9	879.7	897.1
12.5°	820.6	820.6	835.7	840.3	843.8	842.6	857.7	862.3	872.7	875.1	891.3
15°	803.3	804.4	818.3	825.2	829.9	828.7	844.9	850.7	863.5	864.6	884.3
17.5°	789.3	788.1	803.3	809.0	815.9	814.8	832.2	839.1	851.9	855.4	873.9
20°	777.7	776.5	790.4	797.4	802.0	801.0	818.3	826.4	838.0	840.3	858.8
22.5°	763.8	761.5	775.4	781.2	785.8	784.6	799.7	805.6	817.1	819.4	836.8
25°	747.5	745.2	758.1	761.5	765.0	762.7	775.4	778.8	788.1	790.4	807.9
27.5°	729.1	723.2	733.7	733.7	736.0	732.5	741.8	745.2	753.4	753.4	769.7
30°	700.0	692.0	697.7	696.6	697.7	693.2	698.9	700.0	705.9	704.7	716.2
32.5°	659.4	647.9	651.4	647.9	644.5	637.5	644.5	642.1	646.8	642.1	652.6
35°	603.9	592.3	591.1	586.5	583.0	577.2	577.2	571.4	572.6	569.1	576.1
37.5°	543.6	528.5	526.2	516.9	511.1	504.2	504.2	499.6	493.8	491.4	497.2
40°	484.5	468.3	462.5	447.4	441.6	434.6	430.0	424.2	421.9	412.6	417.2
42.5°	433.5	416.1	403.3	387.1	381.3	370.9	363.9	357.0	353.5	343.1	347.7
45°	390.6	369.7	355.8	334.9	326.8	315.2	304.8	296.8	288.6	283.9	281.6
47.5°	354.6	332.6	314.1	290.9	278.1	267.8	253.9	245.7	235.3	229.5	226.0
50°	324.5	300.2	279.3	252.6	240.0	228.4	212.1	199.4	190.1	180.8	178.5
52.5°	297.8	272.3	249.2	219.0	204.0	190.1	172.7	158.8	150.7	140.3	139.1
55°	266.5	244.6	219.0	187.8	172.7	158.8	140.3	126.4	115.9	109.0	106.7
57.5°	233.0	212.1	187.8	156.5	141.4	126.4	109.0	96.2	86.9	81.1	80.0
60°	201.7	182.0	158.8	127.5	112.4	99.7	81.1	68.4	60.3	55.6	53.3
62.5°	178.5	159.9	138.0	109.0	95.1	82.3	64.9	53.3	46.4	41.7	39.4
65°	156.5	138.0	118.2	91.6	80.0	68.4	52.2	41.7	34.8	30.1	27.8
67.5°	133.3	117.1	98.5	76.5	64.9	55.6	41.7	32.5	26.7	23.2	20.9
70°	110.1	95.1	80.0	61.4	53.3	44.1	32.5	25.5	19.7	17.4	15.1
72.5°	86.9	75.4	62.6	47.5	40.6	34.8	25.5	18.5	15.1	12.8	10.4
75°	64.9	56.8	46.4	35.9	30.1	25.5	18.5	13.9	11.6	9.3	8.1
77.5°	46.4	39.4	32.5	24.3	22.0	18.5	12.8	10.4	8.1	5.8	4.6
80°	31.3	27.8	22.0	17.4	13.9	12.8	9.3	7.0	4.6	3.5	3.5
82.5°	20.9	17.4	13.9	10.4	9.3	8.1	5.8	4.6	3.5	2.3	2.3
85°	12.8	10.4	8.1	5.8	5.8	4.6	3.5	2.3	1.2	1.2	1.2
87.5°	5.8	4.6	3.5	2.3	2.3	1.2	1.2	1.2	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4
2.5°	911.0	904.0	899.4	905.2	907.5	904.0	907.5	913.3	919.1	920.3	904.0
5°	912.2	905.2	902.9	909.8	911.0	909.8	913.3	921.4	928.4	930.7	914.5
7.5°	912.2	907.5	906.4	914.5	915.6	914.5	920.3	929.6	936.5	941.1	924.9
10°	909.8	907.5	908.7	915.6	918.0	918.0	926.1	936.5	943.5	948.1	931.9
12.5°	906.4	906.4	906.4	914.5	916.8	918.0	924.9	938.8	943.5	950.4	934.2
15°	900.6	900.6	900.6	908.7	912.2	912.2	920.3	933.0	938.8	945.8	929.6
17.5°	890.1	890.1	891.3	898.3	901.7	901.7	909.8	923.8	927.2	935.3	919.1
20°	875.1	875.1	876.2	883.2	886.7	884.3	894.8	906.4	909.8	916.8	900.6
22.5°	853.0	853.0	853.0	860.0	862.3	861.2	871.6	882.0	882.0	891.3	873.9
25°	820.6	822.9	820.6	827.5	829.9	828.7	838.0	847.2	844.9	855.4	838.0
27.5°	781.2	780.0	780.0	785.8	785.8	784.6	791.6	802.0	799.7	806.7	790.4
30°	726.8	730.2	724.5	732.5	729.1	726.8	731.4	740.6	737.1	742.9	730.2
32.5°	664.1	659.4	659.4	659.4	661.8	656.1	660.7	665.3	661.8	667.6	653.7
35°	581.9	583.0	579.5	580.7	581.9	574.9	579.5	584.2	579.5	583.0	570.3
37.5°	499.6	500.7	492.6	497.2	492.6	490.3	494.9	497.2	492.6	496.1	482.2
40°	417.2	414.9	413.8	413.8	414.9	409.1	412.6	416.1	412.6	414.9	402.2
42.5°	345.4	344.3	342.0	343.1	339.6	338.4	339.6	343.1	339.6	342.0	332.6
45°	282.8	280.5	277.0	278.1	278.1	272.3	275.8	278.1	274.7	275.8	267.8
47.5°	224.9	221.3	221.3	220.3	220.3	217.9	221.3	220.3	216.7	219.0	211.0
50°	175.0	172.7	172.7	172.7	172.7	169.2	170.4	172.7	169.2	169.2	164.5
52.5°	136.8	133.3	131.0	131.0	131.0	129.8	129.8	131.0	127.5	127.5	126.4
55°	103.2	102.0	98.5	98.5	98.5	95.1	96.2	96.2	95.1	95.1	91.6
57.5°	76.5	73.0	70.7	70.7	68.4	68.4	67.2	68.4	66.1	66.1	63.8
60°	51.0	48.7	47.5	46.4	46.4	45.2	46.4	45.2	45.2	44.1	42.9
62.5°	37.1	34.8	32.5	32.5	32.5	31.3	31.3	31.3	31.3	31.3	30.1
65°	26.7	24.3	24.3	23.2	23.2	22.0	22.0	22.0	22.0	22.0	20.9
67.5°	18.5	17.4	16.2	16.2	16.2	16.2	16.2	16.2	15.1	15.1	15.1
70°	13.9	12.8	11.6	11.6	11.6	11.6	11.6	10.4	11.6	11.6	10.4
72.5°	9.3	9.3	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
75°	7.0	7.0	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
77.5°	4.6	4.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	3.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P857249

CATALOG NUMBER: LX4C20D010 EX4C209830 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	899.4	899.4	899.4	899.4	899.4	899.4	899.4	899.4
2.5°	921.4	920.3	918.0	921.4	912.2	908.7	907.5	918.0
5°	934.2	931.9	931.9	935.3	924.9	922.6	920.3	931.9
7.5°	945.8	943.5	943.5	946.9	937.7	935.3	933.0	944.6
10°	952.7	952.7	952.7	955.1	946.9	944.6	943.5	955.1
12.5°	956.2	956.2	955.1	959.7	949.3	949.3	946.9	958.5
15°	951.6	951.6	951.6	955.1	945.8	943.5	943.5	952.7
17.5°	940.0	940.0	938.8	942.3	931.9	931.9	930.7	941.1
20°	922.6	922.6	920.3	924.9	914.5	911.0	909.8	920.3
22.5°	894.8	893.6	892.5	894.8	885.5	883.2	882.0	891.3
25°	858.8	857.7	855.4	857.7	847.2	843.8	843.8	850.7
27.5°	807.9	807.9	804.4	807.9	796.2	795.1	793.9	802.0
30°	745.2	740.6	738.3	742.9	731.4	731.4	729.1	737.1
32.5°	667.6	663.0	661.8	664.1	653.7	650.3	654.9	659.4
35°	578.4	579.5	574.9	574.9	565.6	566.8	568.0	574.9
37.5°	492.6	490.3	489.1	490.3	483.3	481.0	478.7	485.6
40°	412.6	406.8	405.7	405.7	399.9	398.7	399.9	403.3
42.5°	337.3	336.1	331.5	333.8	328.0	330.3	329.1	329.1
45°	272.3	273.5	268.9	272.3	267.8	264.2	264.2	266.5
47.5°	215.6	215.6	214.4	214.4	211.0	212.1	209.7	213.3
50°	166.8	166.8	164.5	165.8	163.5	163.5	162.2	163.5
52.5°	127.5	126.4	126.4	125.2	122.9	124.0	125.2	122.9
55°	92.7	93.9	91.6	92.7	90.4	91.6	90.4	91.6
57.5°	63.8	64.9	62.6	64.9	62.6	63.8	62.6	62.6
60°	44.1	44.1	42.9	44.1	42.9	42.9	41.7	44.1
62.5°	30.1	30.1	30.1	30.1	30.1	29.0	30.1	30.1
65°	22.0	20.9	20.9	20.9	20.9	20.9	20.9	20.9
67.5°	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
70°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
72.5°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
75°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
77.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	0.0	1.2	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)