

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: CORELITE

Report Number: P621601

Luminaire Tested: VLT-FA-050U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621601
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-21)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-FA-050U-050D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

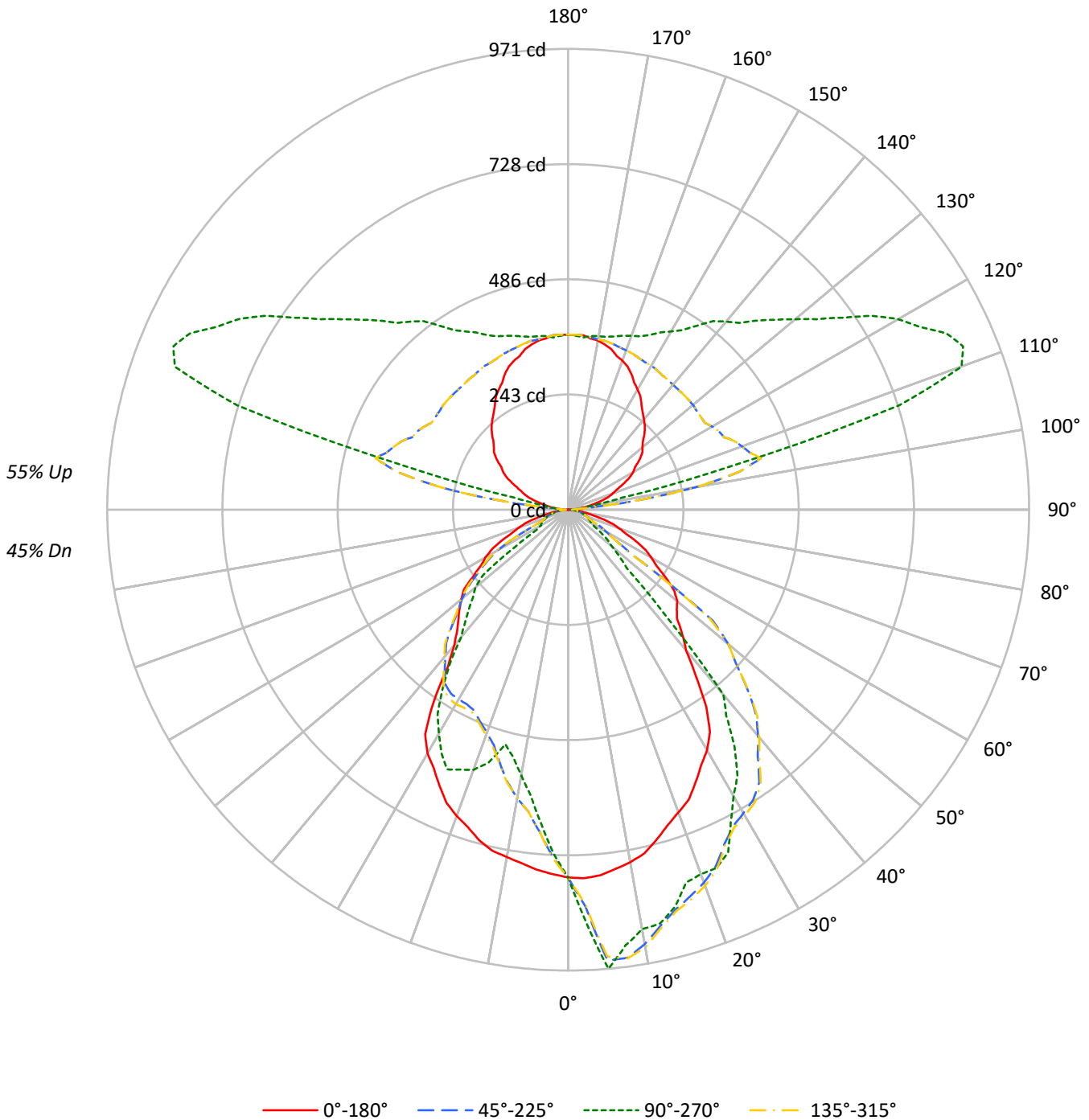
Lumens per Lamp: N/A
Luminaire Lumens: 3579.6 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29
Input Voltage (V): 120
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: 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	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45				
1	97	93	90	87	89	86	83	80	72	69	67	58	57	56	46	46	45	39				
2	89	82	77	72	82	76	71	67	64	60	57	52	50	48	42	40	39	34				
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	38	36	34	30				
4	75	65	58	52	69	60	54	49	51	46	42	42	39	36	34	32	30	26				
5	69	58	51	45	63	54	47	42	46	41	37	38	34	31	31	28	26	23				
6	64	52	45	39	59	49	42	37	41	36	32	35	31	28	28	26	23	21				
7	59	47	40	35	54	44	37	33	38	32	29	32	28	25	26	23	21	18				
8	55	43	36	31	51	40	34	29	34	29	26	29	25	22	24	21	19	17				
9	51	40	32	27	47	37	30	26	32	27	23	27	23	20	22	19	17	15				
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	21	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5559	5559	5559	5559
5°	5569	6994	5484	4769
10°	5496	6540	5415	4140
15°	5345	6440	5363	3800
20°	5181	6241	5242	4454
25°	5023	6308	5079	4780
30°	4845	5772	4910	4513
35°	4439	5350	4328	4045
40°	3618	4762	3492	3293
45°	3287	1768	3318	2999
50°	3344	1346	3281	2850
55°	3155	1045	3046	1705
60°	2906	804	2885	950
65°	2676	830	2623	1004
70°	2381	877	2314	1041
75°	2032	918	1944	1070
80°	1529	946	1434	1107
85°	1037	840	906	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6087 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	2.1
10°-20°	204.7	5.7
20°-30°	306.3	8.6
30°-40°	348.4	9.7
40°-50°	297.9	8.3
50°-60°	200.9	5.6
60°-70°	103.7	2.9
70°-80°	46.8	1.3
80°-90°	14.8	0.4
90°-100°	45.4	1.3
100°-110°	323.2	9.0
110°-120°	438.7	12.3
120°-130°	357.1	10.0
130°-140°	287.2	8.0
140°-150°	226.4	6.3
150°-160°	165.6	4.6
160°-170°	102.8	2.9
170°-180°	35.1	1.0
0°-30°	585.8	16.4
0°-40°	934.1	26.1
0°-60°	1432.9	40.0
0°-90°	1598.2	44.6
90°-120°	807.3	22.6
90°-150°	1677.9	46.9
90°-180°	1981.0	55.3
0°-180°	3579.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	775	775	775	775	775	
5°	773	971	761	662	773	73
15°	720	867	722	512	720	203
25°	634	797	642	604	634	292
35°	507	611	494	462	507	310
45°	324	174	327	296	324	257
55°	252	84	244	136	252	225
65°	158	49	154	59	158	156
75°	73	33	70	39	73	78
85°	13	10	11	13	13	16
90°	0	7	0	7	0	1
95°	19	26	19	26	19	21
105°	72	355	72	355	72	76
115°	128	879	128	879	128	127
125°	183	705	183	705	183	163
135°	227	564	227	564	227	175
145°	269	473	269	473	269	169
155°	316	406	316	406	316	145
165°	350	378	350	378	350	98
175°	369	364	369	364	369	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	777.2	803.7	837.1	860.0	869.9	860.0	831.4	803.5	768.4	757.9	733.1
5°	773.1	854.8	953.6	965.5	970.9	965.5	944.9	849.9	761.3	723.5	682.5
7.5°	763.6	906.5	952.5	925.8	926.0	930.9	953.9	902.1	751.3	692.0	641.6
10°	754.2	935.3	929.1	890.7	897.6	894.5	936.2	929.6	743.1	674.6	617.1
12.5°	741.6	944.2	898.2	885.6	893.2	888.9	902.8	939.3	736.2	662.1	588.7
15°	719.5	931.4	872.4	866.9	866.9	870.7	876.3	935.3	721.9	639.4	554.0
17.5°	696.8	905.8	854.4	827.1	824.2	829.2	860.9	912.4	701.5	614.3	520.4
20°	678.5	888.1	836.1	804.1	817.2	805.7	843.2	892.9	686.4	598.6	499.6
22.5°	662.1	866.2	812.8	799.2	816.6	799.5	819.3	870.9	668.8	580.9	483.9
25°	634.4	829.3	777.8	790.6	796.7	790.6	781.0	832.6	641.5	558.3	467.3
27.5°	606.8	790.5	751.7	760.2	741.4	755.9	755.9	790.7	613.4	531.9	462.3
30°	584.7	763.5	738.4	725.9	696.6	719.8	743.9	763.7	592.6	514.8	461.0
32.5°	555.7	738.8	725.2	682.0	663.2	679.0	731.3	738.3	560.5	499.3	459.8
35°	506.7	704.0	701.4	630.0	610.7	625.4	706.9	702.2	494.1	474.9	450.0
37.5°	441.0	672.9	655.8	577.4	546.8	573.6	661.0	669.6	415.6	452.5	427.1
40°	386.2	652.0	621.8	538.4	508.3	534.5	625.7	650.2	372.8	436.7	401.9
42.5°	355.3	633.4	585.8	497.0	311.0	490.7	589.8	631.1	346.3	416.4	379.8
45°	323.9	599.8	533.5	275.1	174.2	262.0	534.3	591.3	327.0	385.6	346.0
47.5°	310.2	558.3	478.8	165.7	147.1	160.9	478.4	549.2	310.3	354.7	313.6
50°	299.5	532.2	439.7	146.0	120.6	140.6	440.5	523.6	293.9	334.0	291.6
52.5°	281.8	501.0	383.6	121.0	104.2	118.1	374.3	491.1	276.9	311.4	263.8
55°	252.2	441.0	160.0	95.1	83.5	91.2	152.1	426.1	243.5	275.9	231.7
57.5°	220.8	375.4	112.2	74.0	64.8	73.3	111.4	360.3	216.7	233.7	202.1
60°	202.5	331.2	91.4	62.1	56.0	61.3	90.6	318.1	201.0	205.6	175.0
62.5°	184.2	286.4	75.7	54.6	52.8	53.9	75.5	272.0	181.4	181.7	123.3
65°	157.6	216.9	56.0	49.6	48.9	48.9	54.4	209.2	154.5	149.8	70.9
67.5°	130.5	155.8	44.9	45.7	44.9	44.9	44.1	151.4	127.4	119.5	53.6
70°	113.5	119.6	41.8	42.5	41.8	41.8	41.0	116.5	110.3	92.6	50.4
72.5°	97.1	81.7	38.6	38.8	38.6	38.6	37.8	76.7	93.9	65.1	46.0
75°	73.3	40.9	33.1	33.1	33.1	33.1	32.3	39.3	70.1	42.4	39.4
77.5°	50.9	27.0	27.4	27.3	27.3	26.7	26.6	26.8	47.9	29.3	31.8
80°	37.0	22.4	23.6	22.9	22.9	22.9	22.9	21.6	34.7	24.7	26.8
82.5°	26.3	17.8	19.2	18.4	18.4	18.4	18.4	17.6	24.0	20.1	21.8
85°	12.6	11.8	12.6	11.0	10.2	11.0	11.8	11.8	11.0	13.3	14.2
87.5°	3.8	6.1	6.0	5.2	5.2	5.2	5.3	5.5	3.2	6.7	6.6
90°	0.0	2.3	4.6	7.0	7.0	7.0	4.6	2.3	0.0	2.3	4.6
92.5°	5.6	7.8	10.2	14.4	16.2	14.4	10.2	7.8	5.6	7.8	10.2
95°	18.6	34.4	18.6	21.0	25.5	21.0	18.6	34.4	18.6	34.4	18.6
97.5°	32.9	66.1	136.4	40.2	34.8	40.2	136.4	66.1	32.9	66.1	136.4
100°	44.1	82.6	273.7	80.6	53.4	80.6	273.7	82.6	44.1	82.6	273.7
102.5°	55.2	95.6	370.3	212.6	116.5	212.6	370.3	95.6	55.2	95.6	370.3
105°	71.9	110.5	419.9	536.4	354.9	536.4	419.9	110.5	71.9	110.5	419.9
107.5°	88.6	117.7	400.9	780.7	731.2	780.7	400.9	117.7	88.6	117.7	400.9
110°	99.8	127.0	389.7	820.3	881.6	820.3	389.7	127.0	99.8	127.0	389.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	110.9	138.1	378.6	797.1	900.1	797.1	378.6	138.1	110.9	138.1	378.6
115°	127.6	154.8	361.9	752.2	879.2	752.2	361.9	154.8	127.6	154.8	361.9
117.5°	144.8	171.5	357.7	703.6	834.2	703.6	357.7	171.5	144.8	171.5	357.7
120°	157.8	182.7	350.3	666.6	802.7	666.6	350.3	182.7	157.8	182.7	350.3
122.5°	167.0	193.8	341.0	634.8	760.0	634.8	341.0	193.8	167.0	193.8	341.0
125°	183.3	208.2	341.0	596.4	705.2	596.4	341.0	208.2	183.3	208.2	341.0
127.5°	196.7	222.1	341.5	551.8	659.3	551.8	341.5	222.1	196.7	222.1	341.5
130°	204.2	231.4	343.3	522.0	624.1	522.0	343.3	231.4	204.2	231.4	343.3
132.5°	213.4	240.6	343.3	508.6	592.5	508.6	343.3	240.6	213.4	240.6	343.3
135°	227.3	252.3	343.3	491.1	563.7	491.1	343.3	252.3	227.3	252.3	343.3
137.5°	238.9	265.7	343.3	471.9	534.0	471.9	343.3	265.7	238.9	265.7	343.3
140°	248.2	273.2	343.3	460.6	517.3	460.6	343.3	273.2	248.2	273.2	343.3
142.5°	257.5	280.6	345.2	447.6	500.6	447.6	345.2	280.6	257.5	280.6	345.2
145°	269.1	291.8	345.7	427.9	473.3	427.9	345.7	291.8	269.1	291.8	345.7
147.5°	283.0	303.0	348.4	413.7	448.7	413.7	348.4	303.0	283.0	303.0	348.4
150°	292.3	310.5	350.3	404.3	433.8	404.3	350.3	310.5	292.3	310.5	350.3
152.5°	301.6	317.9	350.3	396.8	420.8	396.8	350.3	317.9	301.6	317.9	350.3
155°	315.5	326.8	352.6	387.8	406.0	387.8	352.6	326.8	315.5	326.8	352.6
157.5°	326.6	337.5	355.4	382.2	395.3	382.2	355.4	337.5	326.6	337.5	355.4
160°	334.1	343.1	357.3	378.4	389.7	378.4	357.3	343.1	334.1	343.1	357.3
162.5°	339.6	348.7	359.1	376.5	384.2	376.5	359.1	348.7	339.6	348.7	359.1
165°	350.3	354.8	361.9	371.3	378.1	371.3	361.9	354.8	350.3	354.8	361.9
167.5°	356.3	360.4	364.2	369.0	373.0	369.0	364.2	360.4	356.3	360.4	364.2
170°	361.9	364.2	364.2	368.9	371.2	368.9	364.2	364.2	361.9	364.2	364.2
172.5°	363.8	367.8	366.1	367.1	369.3	367.1	366.1	367.8	363.8	367.8	366.1
175°	368.9	371.1	368.9	366.5	364.2	366.5	368.9	371.1	368.9	371.1	368.9
177.5°	368.9	370.7	368.9	368.8	367.0	368.8	368.9	370.7	368.9	370.7	368.9
180°	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	724.2	723.6	724.8	735.6	757.5	777.2
5°	659.7	662.0	664.3	682.5	720.7	773.1
7.5°	610.0	606.7	611.9	641.5	688.4	763.6
10°	575.9	568.2	575.9	616.3	671.0	754.2
12.5°	543.7	534.1	546.2	590.4	656.5	741.6
15°	502.2	511.5	506.1	555.6	634.7	719.5
17.5°	512.0	558.6	521.9	525.3	613.1	696.8
20°	535.4	583.2	550.8	505.1	599.2	678.5
22.5°	556.6	592.6	563.3	488.1	585.2	662.1
25°	572.8	603.7	571.3	472.8	565.0	634.4
27.5°	573.7	578.0	574.0	471.6	540.1	606.8
30°	563.0	544.6	561.5	472.8	522.3	584.7
32.5°	532.7	511.8	526.3	470.3	504.4	555.7
35°	489.5	461.8	481.8	457.1	476.7	506.7
37.5°	444.0	408.8	436.6	430.9	453.0	441.0
40°	413.1	351.5	407.0	405.1	440.1	386.2
42.5°	373.6	321.2	368.1	384.3	425.8	355.3
45°	301.7	295.5	298.6	349.1	395.6	323.9
47.5°	275.9	271.7	274.3	317.1	361.3	310.2
50°	260.7	255.3	259.2	296.3	339.5	299.5
52.5°	239.7	225.1	238.2	267.9	316.9	281.8
55°	180.3	136.3	179.5	235.6	283.0	252.2
57.5°	105.8	78.8	103.5	205.1	239.8	220.8
60°	71.6	66.2	72.4	180.5	211.0	202.5
62.5°	65.4	63.7	65.5	125.6	185.3	184.2
65°	59.9	59.1	59.9	72.5	153.0	157.6
67.5°	54.2	53.4	54.8	55.6	120.8	130.5
70°	50.4	49.6	50.4	51.2	92.7	113.5
72.5°	46.0	45.2	46.0	46.8	65.2	97.1
75°	39.4	38.6	39.4	40.2	43.2	73.3
77.5°	31.8	31.8	32.6	32.6	30.3	50.9
80°	26.8	26.8	27.6	27.6	26.3	37.0
82.5°	21.7	21.1	22.5	23.2	21.7	26.3
85°	13.4	12.6	14.2	15.0	14.2	12.6
87.5°	6.4	5.8	7.0	7.9	7.3	3.8
90°	7.0	7.0	7.0	4.6	2.3	0.0
92.5°	14.4	16.2	14.4	10.2	7.8	5.6
95°	21.0	25.5	21.0	18.6	34.4	18.6
97.5°	40.2	34.8	40.2	136.4	66.1	32.9
100°	80.6	53.4	80.6	273.7	82.6	44.1
102.5°	212.6	116.5	212.6	370.3	95.6	55.2
105°	536.4	354.9	536.4	419.9	110.5	71.9
107.5°	780.7	731.2	780.7	400.9	117.7	88.6
110°	820.3	881.6	820.3	389.7	127.0	99.8



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	797.1	900.1	797.1	378.6	138.1	110.9
115°	752.2	879.2	752.2	361.9	154.8	127.6
117.5°	703.6	834.2	703.6	357.7	171.5	144.8
120°	666.6	802.7	666.6	350.3	182.7	157.8
122.5°	634.8	760.0	634.8	341.0	193.8	167.0
125°	596.4	705.2	596.4	341.0	208.2	183.3
127.5°	551.8	659.3	551.8	341.5	222.1	196.7
130°	522.0	624.1	522.0	343.3	231.4	204.2
132.5°	508.6	592.5	508.6	343.3	240.6	213.4
135°	491.1	563.7	491.1	343.3	252.3	227.3
137.5°	471.9	534.0	471.9	343.3	265.7	238.9
140°	460.6	517.3	460.6	343.3	273.2	248.2
142.5°	447.6	500.6	447.6	345.2	280.6	257.5
145°	427.9	473.3	427.9	345.7	291.8	269.1
147.5°	413.7	448.7	413.7	348.4	303.0	283.0
150°	404.3	433.8	404.3	350.3	310.5	292.3
152.5°	396.8	420.8	396.8	350.3	317.9	301.6
155°	387.8	406.0	387.8	352.6	326.8	315.5
157.5°	382.2	395.3	382.2	355.4	337.5	326.6
160°	378.4	389.7	378.4	357.3	343.1	334.1
162.5°	376.5	384.2	376.5	359.1	348.7	339.6
165°	371.3	378.1	371.3	361.9	354.8	350.3
167.5°	369.0	373.0	369.0	364.2	360.4	356.3
170°	368.9	371.2	368.9	364.2	364.2	361.9
172.5°	367.1	369.3	367.1	366.1	367.8	363.8
175°	366.5	364.2	366.5	368.9	371.1	368.9
177.5°	368.8	367.0	368.8	368.9	370.7	368.9
180°	368.9	368.9	368.9	368.9	368.9	368.9

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