

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: INVUE

Report Number: P472178

Luminaire Tested: **CCW-VA-2-827-U-T4W**

Issue Date: 01/27/2021

Test Information

Test Method: LM-79-08
Report Number: P472178
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-VA-2-827-U-T4W
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4W DISTRIBUTION LENS
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3850.3 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

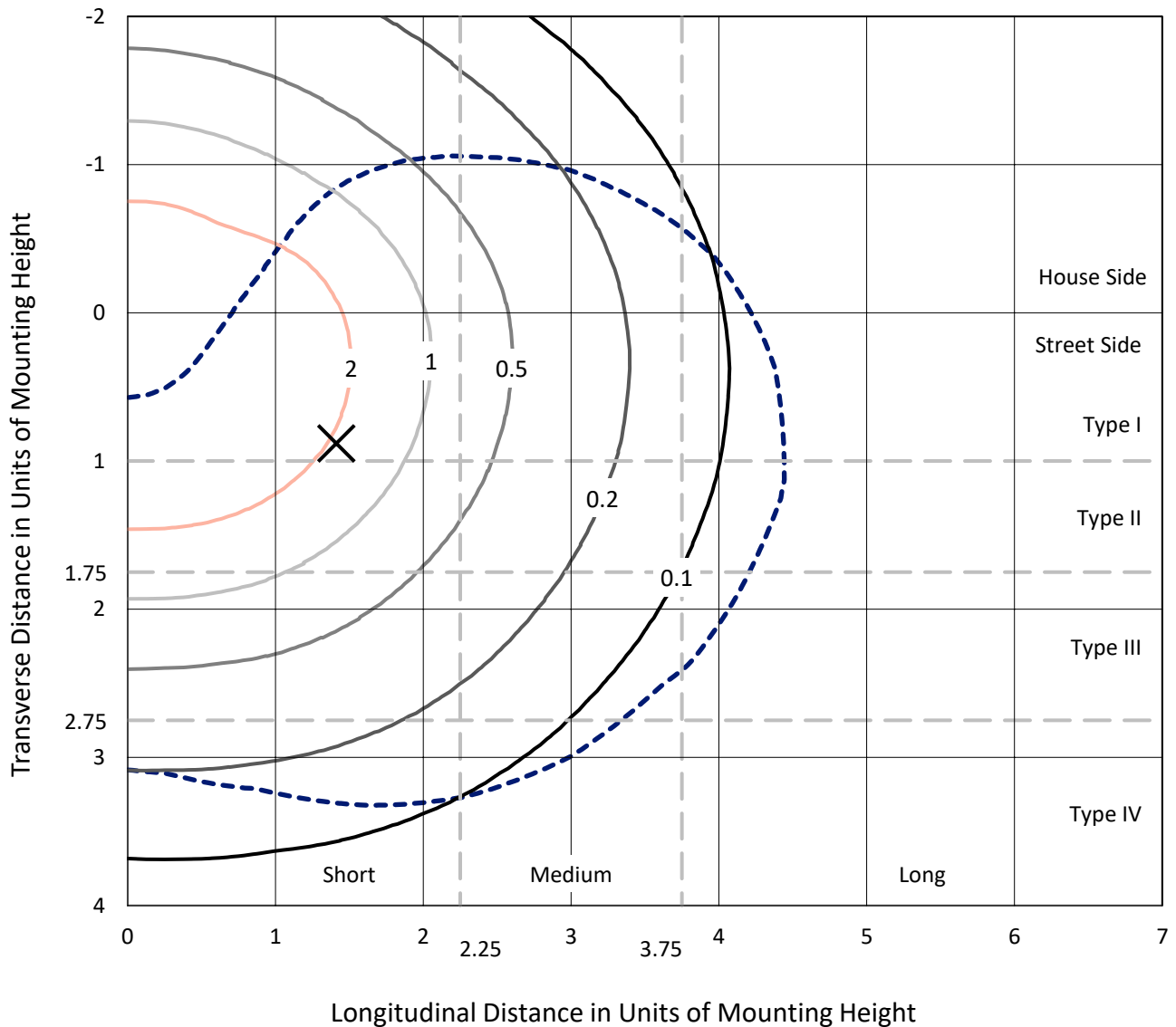
Input Watts (W): 39.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P472178
 CATALOG NUMBER: CCW-VA-2-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

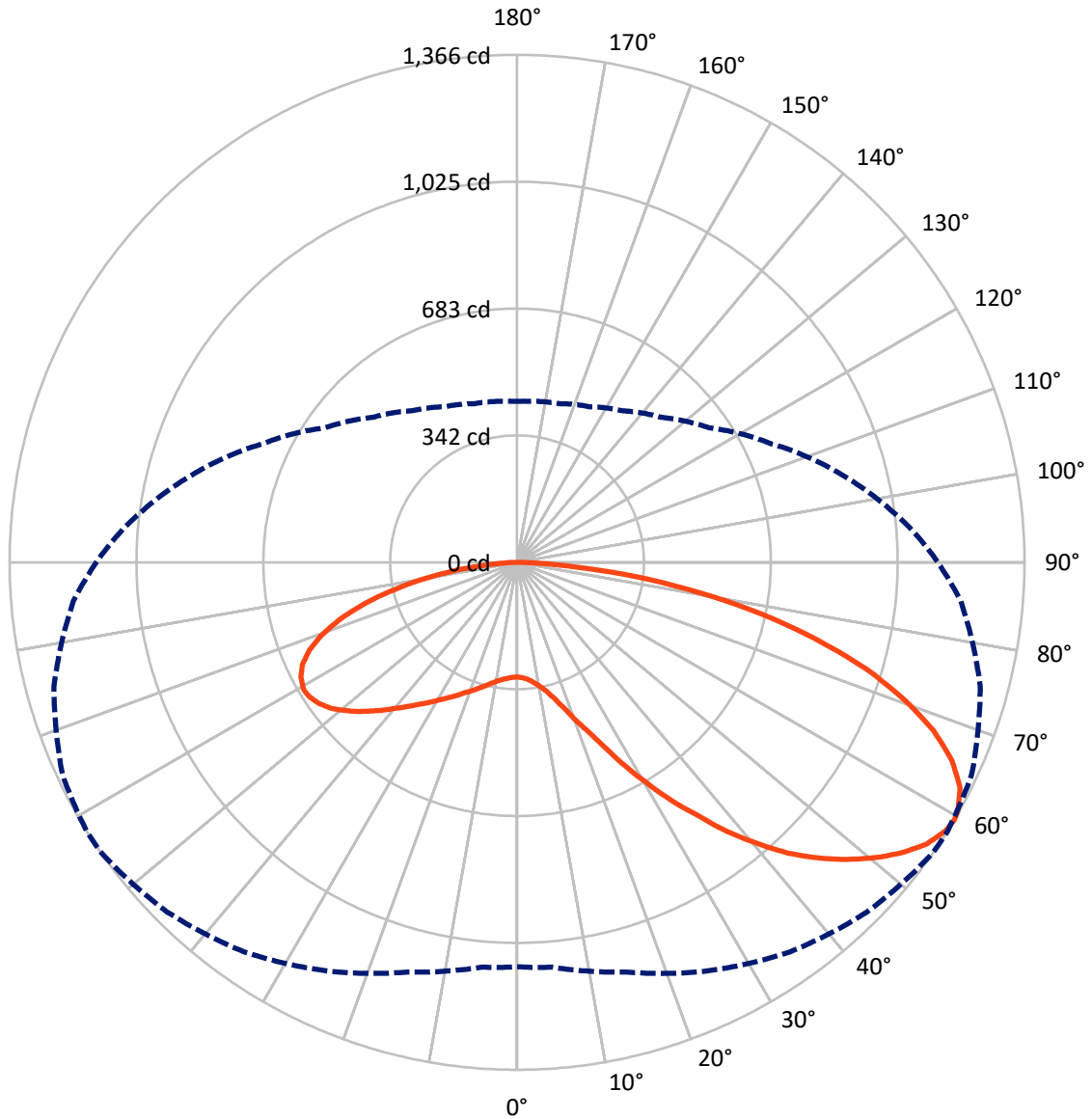
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

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CATALOG NUMBER: CCW-VA-2-827-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 59-Deg Vertical

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 CATALOG NUMBER: CCW-VA-2-827-U-T4W

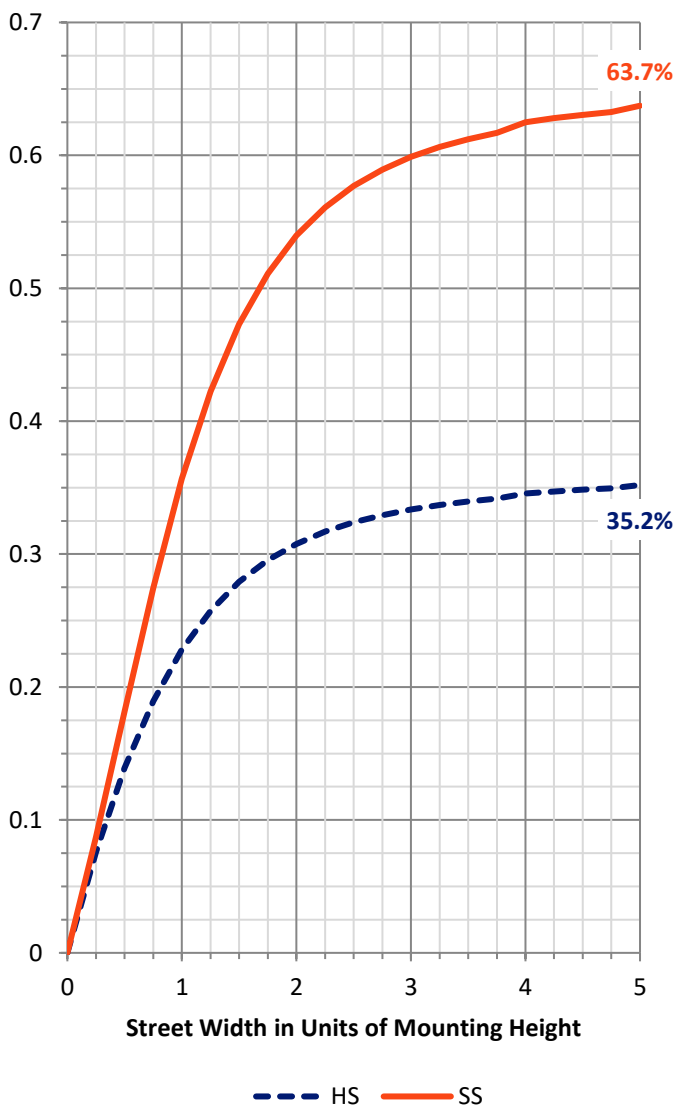
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1373.2	0.0	1373.2
	% Fixture	35.7	0.0	35.7
Street Side	Lumens	2477.2	0.0	2477.2
	% Fixture	64.3	0.0	64.3
Total	Lumens	3850.3	0.0	3850.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.6	0.8
10°-20°	104.4	2.7
20°-30°	220.4	5.7
30°-40°	405.7	10.5
40°-50°	632.3	16.4
50°-60°	830.9	21.6
60°-70°	870.7	22.6
70°-80°	603.7	15.7
80°-90°	151.6	3.9
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°-90°	3850.3	100.0
0°-180°	3850.3	100.0

Coefficient of Utilization



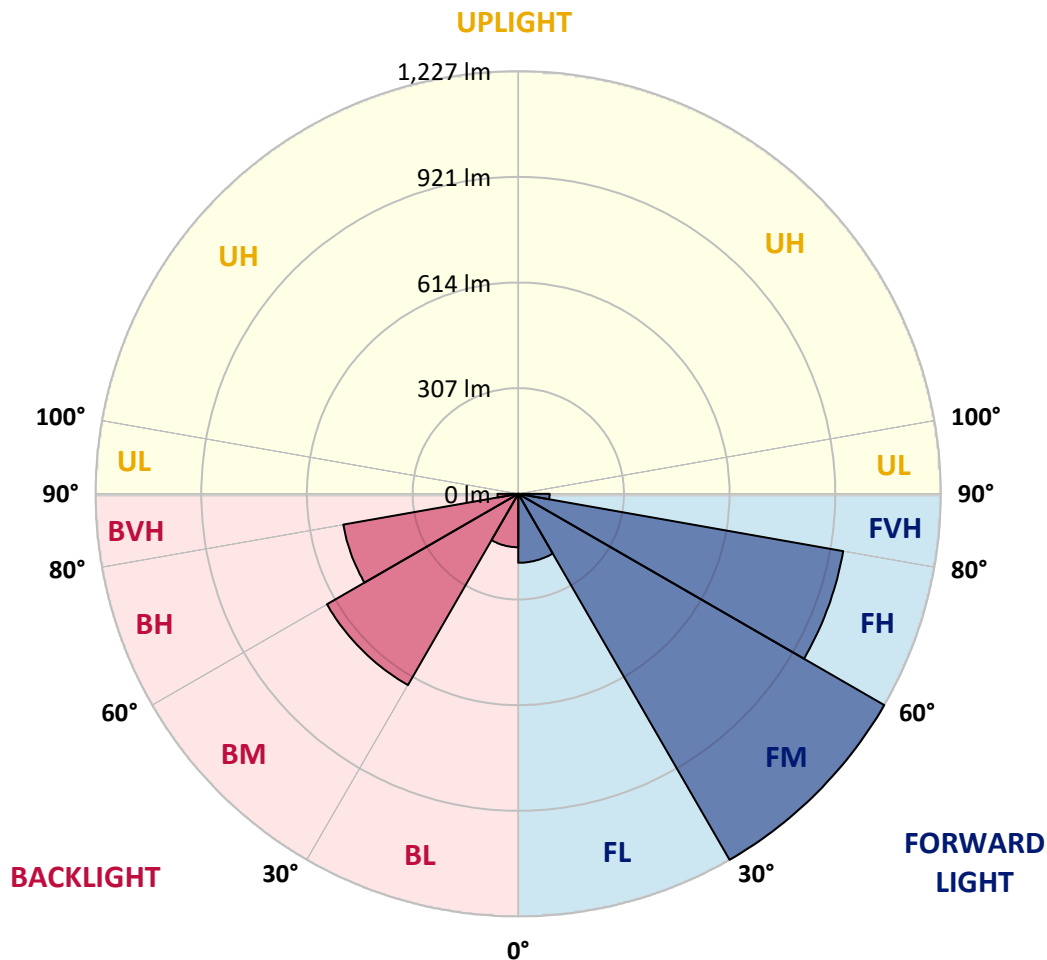
REPORT NUMBER: P472178
 CATALOG NUMBER: CCW-VA-2-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	200.3	5.2			
FM (30°-60°)	1227.4	31.9			
FH (60°-80°)	958.4	24.9			G1/1800
FVH (80°-90°)	91.1	2.4			G1/100
BL (0°-30°)	155.2	4.0	B1/500		
BM (30°-60°)	641.5	16.7	B1/1000		
BH (60°-80°)	515.9	13.4	B2/1000		G2/1000
BVH (80°-90°)	60.5	1.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





REPORT NUMBER: P472178
 CATALOG NUMBER: CCW-VA-2-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7
2.5°	313.0	313.0	313.0	312.1	312.1	312.1	311.3	311.3	311.3	310.4	309.5
5°	319.9	319.9	319.1	319.9	319.1	318.2	317.3	317.3	317.3	316.5	315.6
7.5°	329.5	330.3	329.5	330.3	329.5	328.6	326.9	326.9	326.0	324.3	322.5
10°	344.2	344.2	344.2	343.3	342.5	341.6	340.7	339.9	339.0	336.4	333.8
12.5°	362.4	362.4	362.4	360.7	360.7	358.9	358.1	357.2	355.5	352.0	348.5
15°	385.0	384.1	386.7	386.7	385.8	385.8	383.2	381.5	379.8	374.6	366.8
17.5°	415.3	414.4	417.0	418.8	418.8	419.6	415.3	413.6	407.5	400.6	390.2
20°	456.1	454.3	456.9	458.7	456.9	458.7	454.3	455.2	446.5	434.4	417.9
22.5°	500.3	500.3	502.9	502.9	503.7	505.5	500.3	497.7	490.7	473.4	452.6
25°	554.9	559.2	559.2	559.2	562.7	563.6	558.4	554.0	544.5	521.1	492.5
27.5°	621.7	620.8	619.9	625.1	625.1	626.9	623.4	621.7	610.4	581.8	538.4
30°	692.8	687.6	691.0	692.8	696.2	698.8	695.4	690.2	676.3	645.1	591.3
32.5°	757.8	761.3	766.5	768.2	773.4	774.3	765.6	765.6	751.7	711.8	656.3
35°	831.5	831.5	845.4	851.4	851.4	856.6	843.6	836.7	827.1	785.5	715.3
37.5°	895.6	897.4	908.6	922.5	924.3	932.1	922.5	919.9	902.6	860.1	782.1
40°	955.5	957.2	971.1	987.5	997.1	1009.2	999.7	995.3	977.1	928.6	848.8
42.5°	1002.3	1005.8	1023.1	1047.4	1063.0	1077.7	1073.4	1070.8	1045.6	994.5	910.4
45°	1037.8	1043.9	1068.2	1096.8	1118.5	1140.1	1141.0	1135.8	1112.4	1055.2	970.2
47.5°	1066.4	1073.4	1100.3	1136.7	1169.6	1196.5	1201.7	1195.6	1174.0	1114.1	1024.0
50°	1089.9	1093.3	1123.7	1170.5	1211.2	1245.1	1255.5	1250.3	1231.2	1163.6	1070.8
52.5°	1102.0	1107.2	1141.9	1195.6	1245.1	1285.8	1301.4	1298.8	1276.3	1208.6	1112.4
55°	1108.1	1113.3	1154.0	1215.6	1271.1	1318.7	1337.8	1338.7	1317.0	1249.4	1151.4
57.5°	1101.1	1108.1	1152.3	1220.8	1282.3	1333.5	1363.0	1362.1	1344.8	1280.6	1184.4
59°	1089.0	1094.2	1141.9	1213.8	1280.6	1331.8	1365.6	1366.4	1350.8	1291.0	1199.1
60°	1075.1	1081.2	1129.7	1205.2	1273.7	1325.7	1361.2	1363.0	1350.0	1293.6	1205.2
62.5°	1027.4	1035.2	1089.0	1169.6	1244.2	1293.6	1336.1	1338.7	1331.8	1286.7	1209.5
65°	960.7	967.6	1025.7	1111.5	1189.6	1240.7	1280.6	1286.7	1285.8	1255.5	1192.2
67.5°	879.2	880.0	934.7	1028.3	1109.8	1160.1	1198.2	1208.6	1216.4	1196.5	1141.0
70°	781.2	780.3	833.2	926.0	1007.5	1060.4	1098.5	1105.5	1125.4	1109.8	1064.7
72.5°	659.8	670.2	719.6	797.7	878.3	937.3	971.1	984.1	995.3	998.8	961.5
75°	545.4	556.6	595.6	668.5	737.8	792.5	828.9	834.9	855.8	861.0	826.3
77.5°	436.1	437.0	465.6	523.7	587.0	632.1	661.5	677.1	688.4	698.8	662.4
80°	306.1	310.4	330.3	372.0	421.4	469.1	493.3	503.7	511.5	518.5	506.3
82.5°	191.6	193.3	206.4	231.5	265.3	292.2	317.3	326.0	327.7	343.3	341.6
85°	91.0	91.9	100.6	112.7	127.5	149.1	158.7	158.7	170.8	182.1	182.1
87.5°	12.1	12.1	14.7	16.5	20.8	26.9	37.3	38.1	45.1	50.3	54.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P472178
 CATALOG NUMBER: CCW-VA-2-827-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7	308.7
2.5°	309.5	309.5	309.5	309.5	309.5	308.7	309.5	309.5	309.5	309.5	309.5
5°	315.6	314.7	313.9	313.0	313.0	312.1	312.1	312.1	312.1	312.1	312.1
7.5°	321.7	320.8	319.9	318.2	317.3	316.5	316.5	315.6	315.6	315.6	315.6
10°	332.1	331.2	327.7	325.1	323.4	322.5	321.7	320.8	319.9	319.9	319.9
12.5°	345.9	344.2	338.1	334.7	332.1	330.3	328.6	327.7	326.9	326.0	326.0
15°	363.3	358.9	351.1	345.9	342.5	339.9	337.3	335.5	334.7	333.8	333.8
17.5°	384.1	378.9	368.5	358.9	352.9	348.5	345.1	342.5	341.6	341.6	341.6
20°	410.1	401.4	386.7	373.7	364.2	358.1	352.9	350.3	349.4	348.5	347.7
22.5°	440.5	429.2	407.5	387.6	375.4	366.8	360.7	357.2	354.6	353.7	353.7
25°	475.1	458.7	430.0	405.8	389.3	377.2	369.4	365.0	360.7	358.9	358.9
27.5°	516.7	495.1	456.9	424.8	402.3	387.6	378.9	372.8	368.5	365.0	363.3
30°	561.8	537.6	486.4	445.7	417.0	400.6	390.2	383.2	377.2	371.1	370.2
32.5°	619.1	584.4	522.0	469.1	434.4	413.6	401.4	392.8	385.0	378.9	377.2
35°	677.1	635.5	559.2	493.3	450.9	425.7	411.0	401.4	393.6	386.7	385.8
37.5°	737.0	692.8	600.0	522.0	469.9	439.6	421.4	411.0	401.4	394.5	393.6
40°	799.4	747.4	641.6	551.4	489.9	453.5	432.6	419.6	409.2	403.2	402.3
42.5°	858.4	802.0	686.7	586.1	513.3	468.2	443.9	430.0	417.0	411.0	410.1
45°	914.7	854.0	731.8	618.2	536.7	483.8	455.2	438.7	424.8	418.8	417.9
47.5°	965.9	905.2	773.4	652.9	561.0	501.1	467.3	447.4	431.8	425.7	425.7
50°	1011.8	948.5	814.1	685.0	583.5	518.5	477.7	455.2	439.6	433.5	432.6
52.5°	1055.2	986.7	849.7	712.7	605.2	534.1	488.1	461.3	444.8	437.8	437.0
55°	1089.9	1021.4	879.2	735.2	619.9	544.5	495.1	464.7	446.5	440.5	439.6
57.5°	1120.2	1050.0	900.0	750.8	629.5	550.6	498.5	464.7	445.7	438.7	437.8
59°	1133.2	1062.1	906.9	755.2	631.2	551.4	497.7	462.1	442.2	435.2	433.5
60°	1140.1	1067.3	909.5	756.0	630.3	549.7	496.8	459.5	438.7	430.9	430.9
62.5°	1147.1	1071.6	906.0	749.1	620.8	540.2	488.1	449.1	425.7	417.0	417.0
65°	1132.3	1056.0	886.1	730.0	601.7	523.7	471.7	431.8	405.8	397.1	397.1
67.5°	1089.0	1017.9	849.7	694.5	570.5	495.1	444.8	404.0	379.8	370.2	367.6
70°	1015.3	955.5	792.5	643.3	528.0	458.7	411.0	372.0	346.8	337.3	333.8
72.5°	916.4	857.5	716.2	580.9	471.7	411.0	369.4	332.1	304.3	294.8	295.7
75°	780.3	738.7	617.3	502.0	406.6	350.3	315.6	284.4	261.0	253.2	254.0
77.5°	632.9	598.2	500.3	409.2	332.1	288.7	259.2	234.1	218.5	214.2	211.6
80°	484.7	450.9	375.4	305.2	252.3	222.0	202.0	184.7	172.5	166.5	168.2
82.5°	325.1	304.3	248.8	202.0	171.7	150.0	143.1	131.8	127.5	124.0	126.6
85°	175.1	156.9	130.1	108.4	94.5	88.4	90.2	89.3	85.8	85.0	87.6
87.5°	57.2	49.4	38.1	32.1	32.9	29.5	29.5	27.7	25.1	24.3	26.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)