

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: P401802

Luminaire Tested: **ENT-SA1F-727-U-T2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401802  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1F-727-U-T2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6481 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

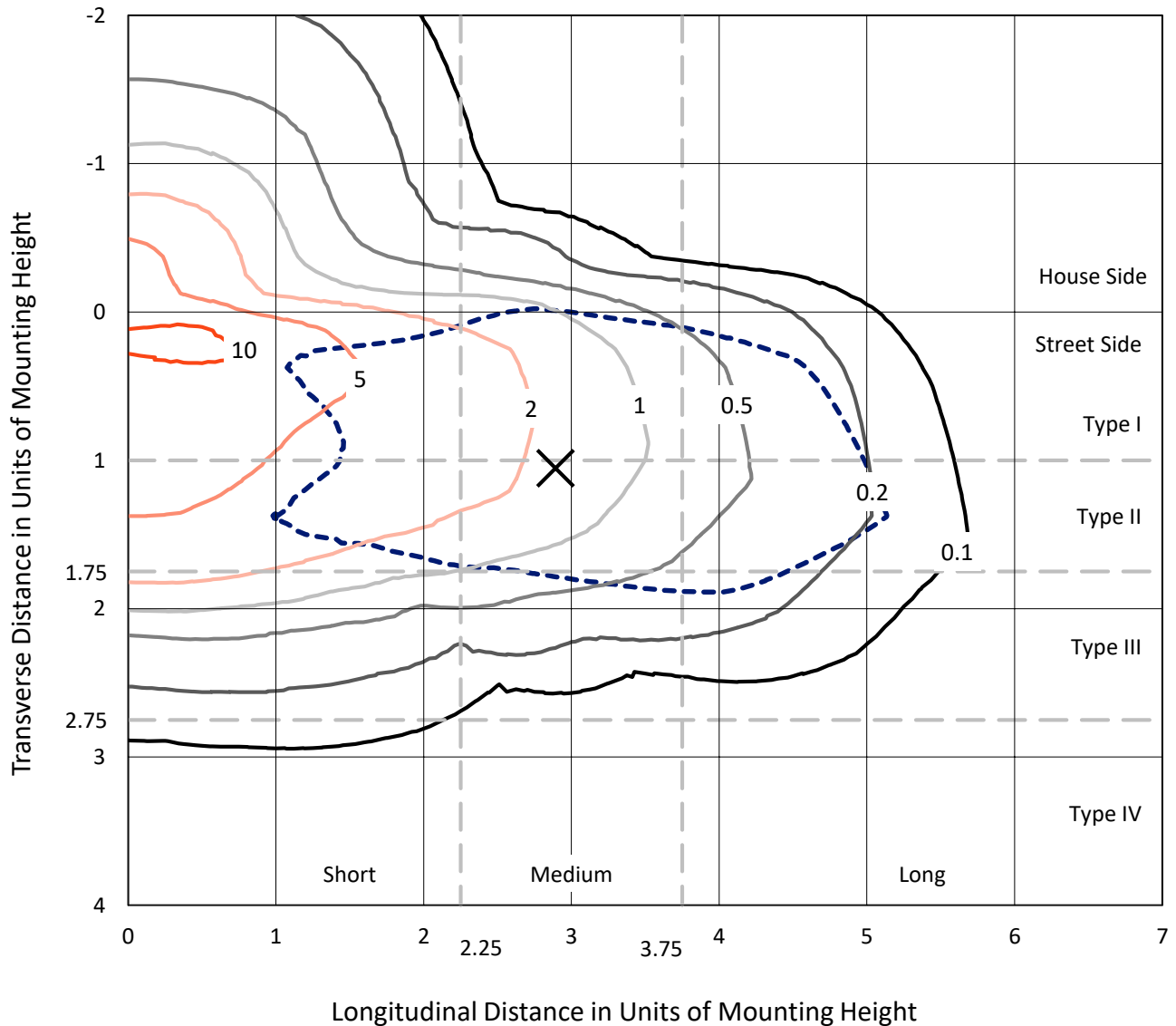
Input Watts (W): 66.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P401802  
 CATALOG NUMBER: ENT-SA1F-727-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

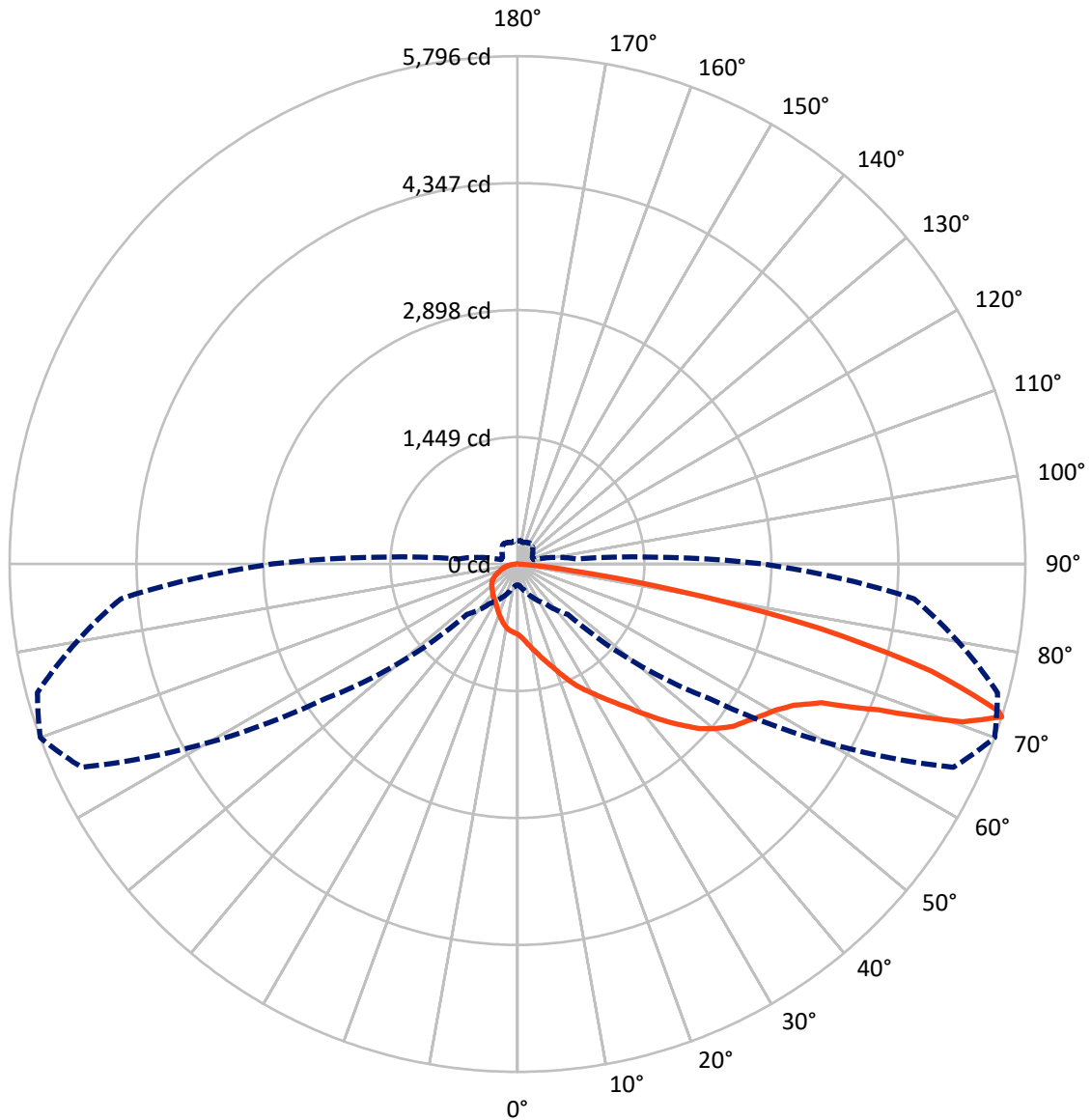
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.2 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401802  
CATALOG NUMBER: ENT-SA1F-727-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P401802

CATALOG NUMBER: ENT-SA1F-727-U-T2

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1204.3	0.0	1204.3
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	5276.7	0.0	5276.7
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	6481.0	0.0	6481.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.7	1.2
10°-20°	258.8	4.0
20°-30°	458.3	7.1
30°-40°	681.4	10.5
40°-50°	988.6	15.3
50°-60°	1350.6	20.8
60°-70°	1478.7	22.8
70°-80°	1051.8	16.2
80°-90°	132.0	2.0
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°	6481.0	100.0
0°-180°	6481.0	100.0



REPORT NUMBER: P401802

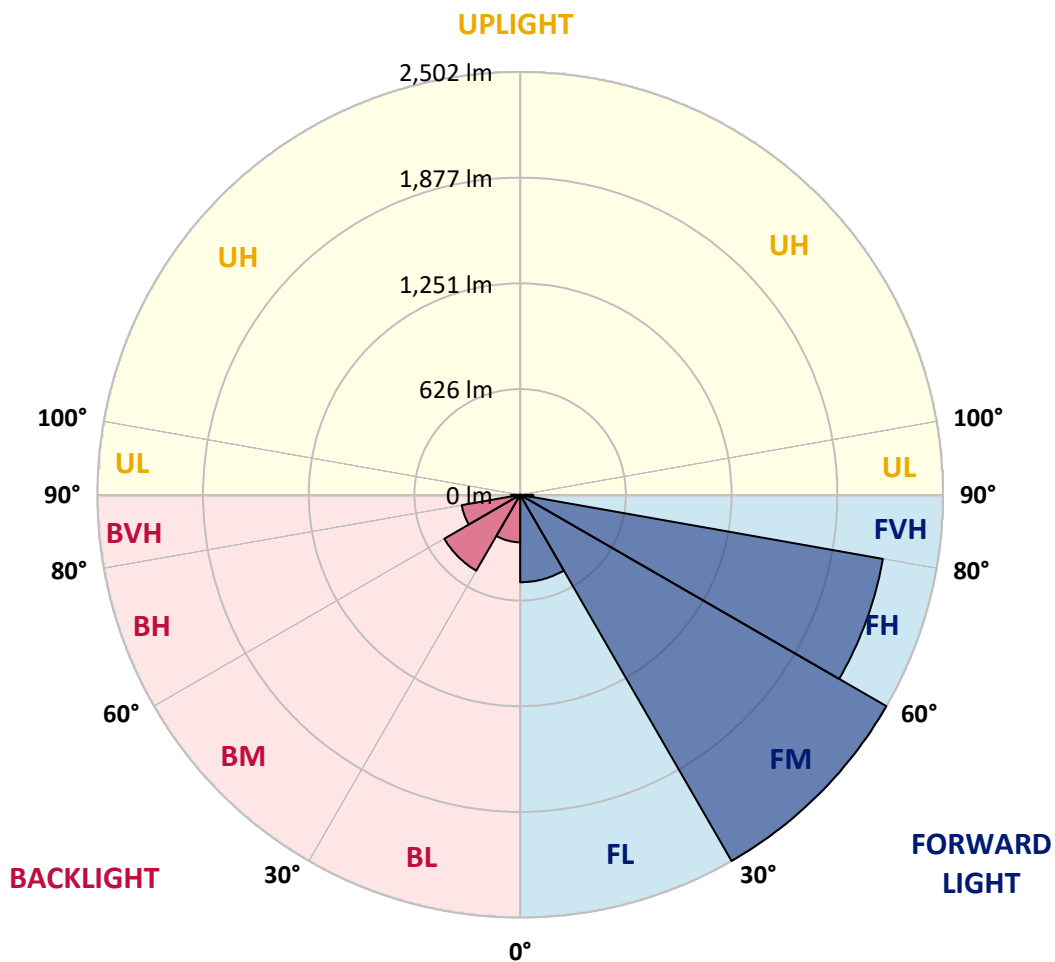
CATALOG NUMBER: ENT-SA1F-727-U-T2

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	517.3	8.0			
FM	(30°-60°)	2502.1	38.6			
FH	(60°-80°)	2179.4	33.6			G2/5000
FVH	(80°-90°)	78.0	1.2			G1/100
BL	(0°-30°)	280.6	4.3	B1/500		
BM	(30°-60°)	518.5	8.0	B1/1000		
BH	(60°-80°)	351.1	5.4	B1/500		G1/500
BVH	(80°-90°)	54.0	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Medium





REPORT NUMBER: P401802

CATALOG NUMBER: ENT-SA1F-727-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6
2.5°	892.4	887.8	888.7	880.4	875.8	864.7	852.6	839.7	833.2	828.5	812.8
5°	979.4	979.4	983.1	976.7	959.1	940.6	919.3	890.6	878.5	861.9	830.4
7.5°	1051.7	1053.5	1053.5	1051.7	1035.9	1015.5	987.8	952.6	933.2	909.1	860.0
10°	1088.7	1093.3	1097.0	1099.8	1097.9	1085.9	1054.4	1018.3	991.5	960.0	894.3
12.5°	1107.2	1109.0	1115.5	1129.4	1140.5	1149.8	1126.6	1084.1	1057.2	1019.3	931.3
15°	1127.6	1127.6	1134.0	1151.6	1172.9	1197.9	1195.1	1161.8	1133.1	1085.9	978.5
17.5°	1140.5	1144.2	1156.3	1174.8	1204.4	1246.1	1267.4	1248.8	1211.8	1161.8	1029.4
20°	1133.1	1135.9	1160.0	1196.1	1234.0	1287.7	1341.4	1341.4	1306.2	1248.8	1085.9
22.5°	1147.0	1151.6	1168.3	1202.5	1254.4	1323.8	1411.8	1442.3	1411.8	1348.8	1151.6
25°	1200.7	1198.8	1212.7	1226.6	1271.1	1357.2	1471.9	1550.6	1522.9	1453.4	1215.5
27.5°	1278.5	1278.5	1285.9	1284.9	1300.7	1384.9	1524.7	1646.0	1622.8	1539.5	1268.3
30°	1368.3	1370.1	1368.3	1367.3	1364.6	1422.9	1571.9	1731.2	1719.1	1636.7	1316.4
32.5°	1477.5	1482.1	1474.7	1456.2	1445.1	1477.5	1611.7	1826.5	1830.2	1733.0	1363.6
35°	1614.5	1621.9	1594.1	1567.3	1539.5	1554.3	1658.0	1916.3	1953.3	1842.2	1421.0
37.5°	1751.5	1763.6	1758.9	1686.7	1647.8	1646.9	1726.5	2028.3	2090.3	1984.8	1502.5
40°	1867.2	1877.4	1883.0	1817.2	1763.6	1761.7	1827.4	2145.0	2258.8	2148.7	1598.8
42.5°	1944.1	1953.3	1970.0	1931.1	1881.1	1904.3	1938.5	2260.7	2440.3	2348.6	1717.3
45°	2027.4	2034.8	2045.0	2022.8	1996.8	2063.5	2079.2	2389.4	2621.7	2563.4	1856.1
47.5°	2116.3	2123.7	2129.2	2112.6	2103.3	2196.8	2217.2	2520.8	2805.0	2785.6	1991.3
50°	2214.4	2217.2	2222.7	2214.4	2217.2	2318.1	2331.0	2636.5	2950.4	3017.0	2132.0
52.5°	2382.9	2386.6	2388.4	2348.6	2334.7	2394.9	2422.7	2759.7	3078.1	3209.6	2256.1
55°	2516.2	2529.1	2587.5	2561.6	2528.2	2449.5	2498.6	2858.7	3168.8	3389.2	2385.7
57.5°	2407.0	2436.6	2581.9	2704.1	2797.6	2609.7	2588.4	2960.5	3273.5	3543.8	2536.6
60°	2089.4	2132.9	2344.0	2598.6	2901.3	2977.2	2772.6	3087.4	3387.3	3704.9	2698.6
62.5°	1448.8	1493.2	1784.8	2191.3	2726.3	3187.4	3277.2	3312.3	3545.6	3869.6	2909.6
65°	694.3	739.7	980.4	1409.0	2153.3	3052.2	3865.0	3778.9	3812.2	4078.9	3220.7
67.5°	441.6	465.7	560.1	767.4	1252.5	2377.3	4076.1	4708.4	4443.6	4561.2	3840.0
70°	323.1	328.6	410.1	531.4	743.4	1388.6	3599.3	5598.0	5390.6	5377.7	4587.1
72°	238.8	248.1	311.1	424.0	549.9	811.9	2678.2	5489.7	5796.1	5673.0	4542.7
72.5°	225.0	232.4	287.0	400.8	519.3	712.8	2399.5	5363.8	5746.1	5681.3	4457.5
75°	163.9	169.4	196.3	285.1	401.8	412.9	1281.2	4116.8	4879.6	5424.0	4040.9
77.5°	112.9	116.6	130.5	175.0	274.9	279.6	543.4	2810.6	3521.6	4337.1	3107.7
80°	68.5	70.4	78.7	95.4	175.0	165.7	224.0	1469.2	1837.6	2357.9	1441.4
82.5°	28.7	29.6	34.3	38.0	74.1	78.7	90.7	479.5	608.2	736.9	415.7
85°	0.0	0.0	0.9	0.9	1.9	8.3	13.0	59.2	89.8	107.4	75.0
87.5°	0.0	0.0	0.9	0.9	0.9	1.9	1.9	2.8	3.7	3.7	5.6
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: P401802

CATALOG NUMBER: ENT-SA1F-727-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6	802.6
2.5°	805.4	801.7	790.6	781.3	773.9	761.9	761.0	751.7	751.7	748.9	747.1
5°	818.4	806.3	784.1	763.7	748.9	731.3	723.0	712.8	706.3	702.6	703.6
7.5°	835.0	814.7	776.7	742.5	714.7	692.5	679.5	671.2	666.5	664.7	664.7
10°	858.2	826.7	764.7	712.8	677.6	661.0	654.5	653.6	654.5	655.4	656.4
12.5°	884.1	835.0	742.5	677.6	649.9	643.4	647.1	655.4	662.8	665.6	665.6
15°	910.9	840.6	711.9	645.2	628.6	635.1	648.0	663.8	675.8	683.2	685.1
17.5°	938.7	841.5	679.5	615.6	610.1	626.7	649.9	674.9	694.3	706.3	708.2
20°	968.3	839.7	641.5	588.8	591.6	619.3	651.7	686.0	711.9	727.6	729.5
22.5°	1000.7	832.2	604.5	562.9	575.8	611.9	649.9	689.7	717.5	736.0	739.7
25°	1032.2	817.4	567.5	539.7	564.7	604.5	640.6	674.9	701.7	719.3	723.9
27.5°	1048.9	786.0	532.3	522.1	556.4	593.4	619.3	642.5	657.3	668.4	673.0
30°	1051.7	741.5	503.6	510.1	547.1	577.7	592.5	596.2	593.4	597.1	592.5
32.5°	1046.1	693.4	480.5	500.8	532.3	555.5	559.2	548.0	531.4	508.2	509.2
35°	1042.4	640.6	461.9	487.9	512.9	527.7	521.2	503.6	472.1	444.4	442.5
37.5°	1048.9	592.5	446.2	471.2	487.9	494.4	485.1	461.9	434.2	410.1	407.3
40°	1067.4	557.3	431.4	452.7	461.0	465.7	454.5	434.2	423.1	405.5	402.7
42.5°	1103.5	533.2	417.5	432.3	436.0	440.7	429.5	415.7	425.8	422.1	422.1
45°	1153.5	522.1	405.5	412.9	416.6	424.0	417.5	405.5	416.6	395.3	391.6
47.5°	1218.3	525.8	397.1	393.4	404.6	417.5	410.1	395.3	391.6	353.6	347.2
50°	1286.8	545.3	388.8	377.7	391.6	409.2	399.9	376.8	354.6	335.1	331.4
52.5°	1367.3	577.7	381.4	360.1	376.8	399.9	393.4	368.4	345.3	331.4	328.6
55°	1456.2	609.1	372.2	339.8	357.3	397.1	395.3	362.9	332.3	325.9	324.0
57.5°	1556.2	635.1	361.0	316.6	337.9	388.8	387.0	349.9	328.6	323.1	322.2
60°	1681.2	665.6	341.6	289.8	318.5	373.1	371.2	343.5	320.3	315.7	313.8
62.5°	1851.5	722.1	308.3	264.8	298.1	345.3	356.4	330.5	308.3	307.3	307.3
65°	2132.0	831.3	274.0	243.5	274.9	318.5	337.0	315.7	297.2	301.8	301.8
67.5°	2662.5	978.5	238.8	223.1	252.7	292.5	320.3	300.9	285.1	294.4	294.4
70°	3071.6	923.9	211.1	203.7	230.5	269.4	299.0	285.1	270.3	286.1	284.2
72°	2802.2	676.7	192.6	187.9	212.0	250.0	280.5	270.3	254.6	267.5	263.8
72.5°	2690.2	614.7	187.0	183.3	206.4	246.2	276.8	266.6	250.0	262.9	257.4
75°	2346.8	518.4	162.9	161.1	183.3	221.3	252.7	247.2	230.5	237.9	232.4
77.5°	1942.2	437.0	137.0	140.7	156.5	197.2	227.7	222.2	206.4	205.5	204.6
80°	910.9	243.5	112.9	115.7	131.5	168.5	196.3	192.6	177.7	175.9	173.1
82.5°	263.8	116.6	87.0	88.9	105.5	137.9	168.5	166.6	155.5	152.7	146.3
85°	49.1	38.0	47.2	55.5	76.8	114.8	153.7	150.0	133.3	121.3	112.0
87.5°	2.8	7.4	15.7	26.8	49.1	86.1	124.1	121.3	106.5	91.6	92.6
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)