

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: P401868

Luminaire Tested: **ENT-SA1F-740-U-T2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401868  
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-740-U-T2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7749 lumens  
Efficiency: N/A  
Efficacy: 117.2 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

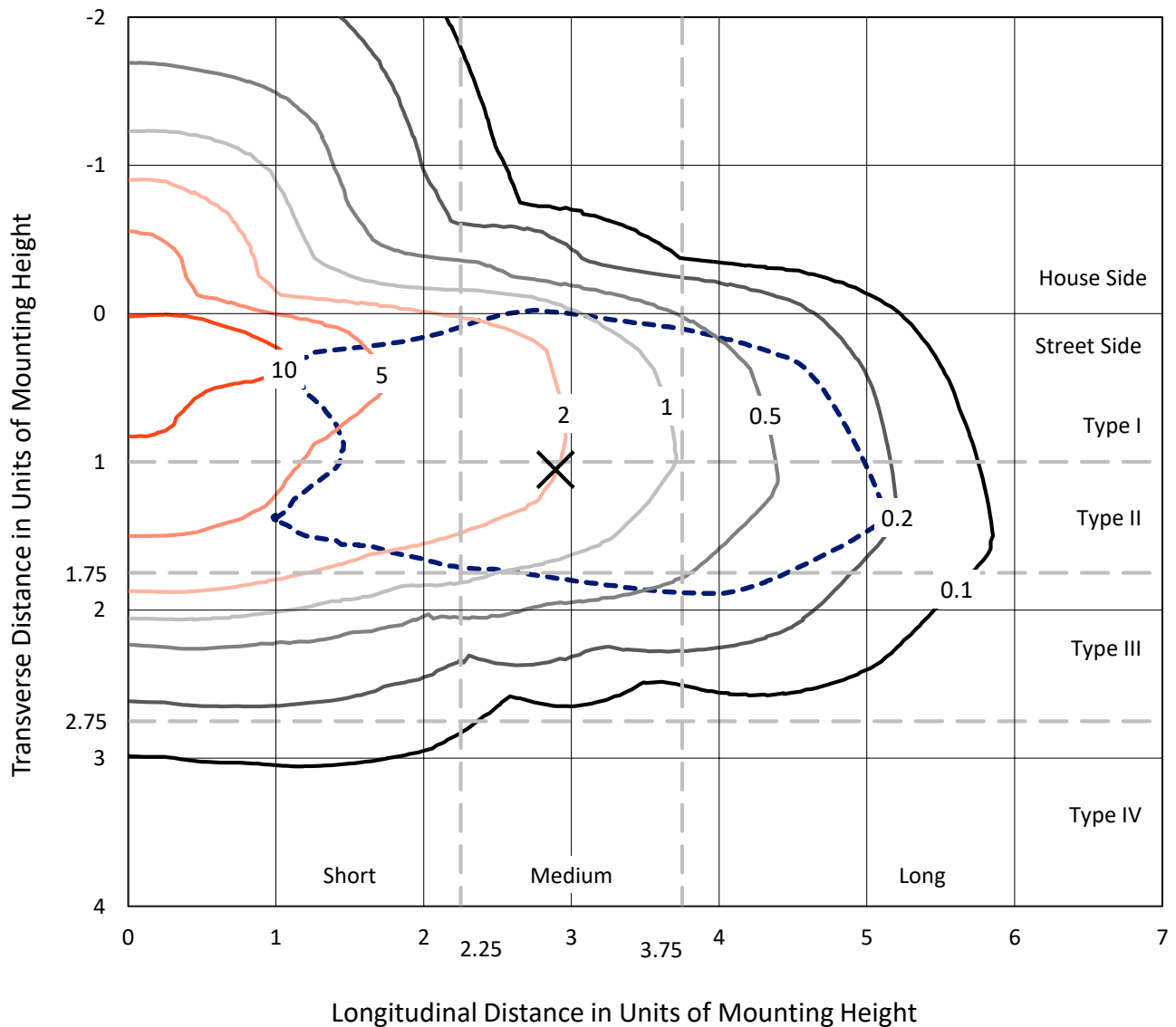
Input Watts (W): 66.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

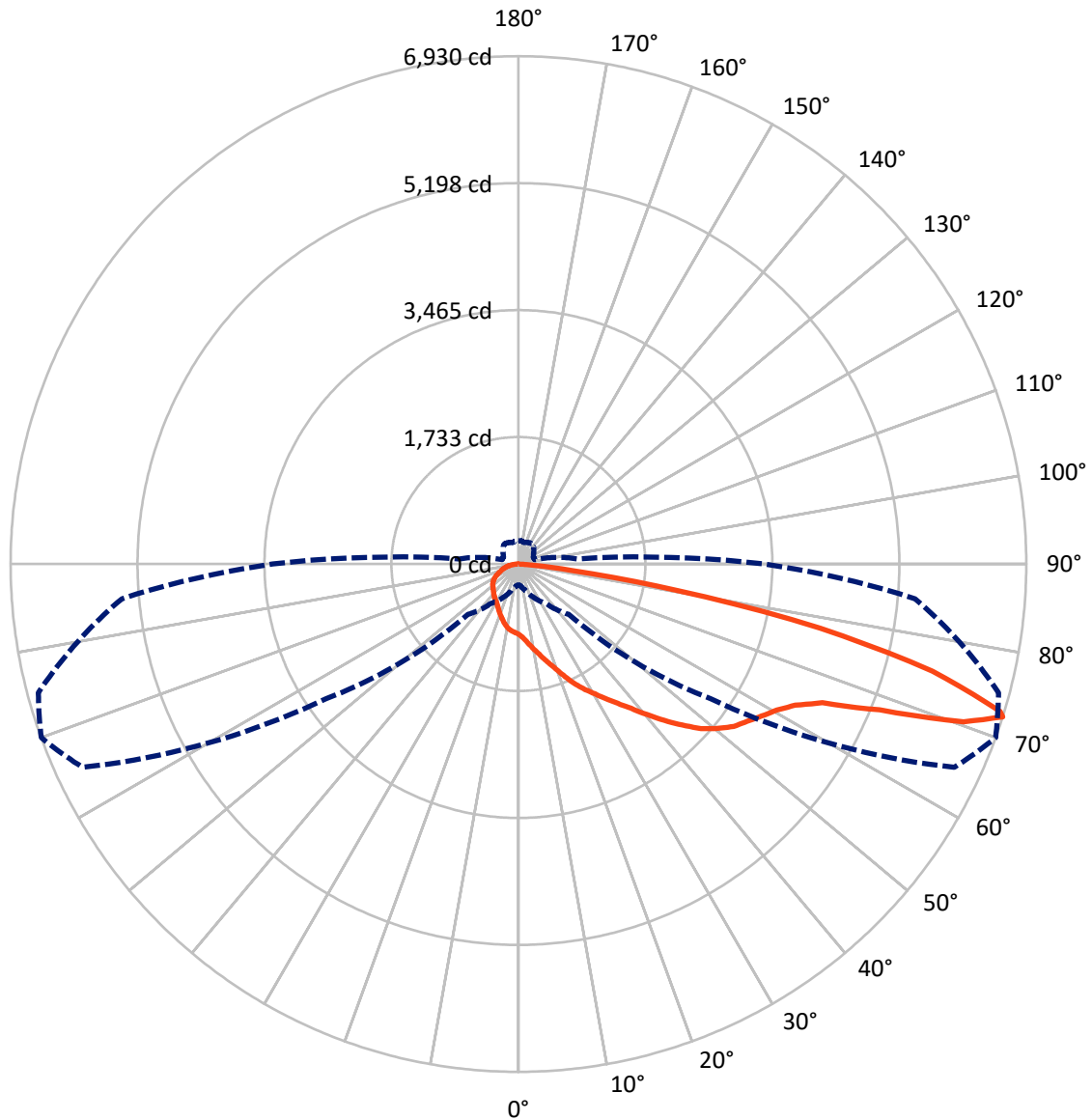
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.4 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1439.9	0.0	1439.9
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	6309.1	0.0	6309.1
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	7749.0	0.0	7749.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.5	1.2
10°-20°	309.5	4.0
20°-30°	548.0	7.1
30°-40°	814.7	10.5
40°-50°	1182.0	15.3
50°-60°	1614.8	20.8
60°-70°	1768.0	22.8
70°-80°	1257.6	16.2
80°-90°	157.9	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°	7749.0	100.0
0°-180°	7749.0	100.0



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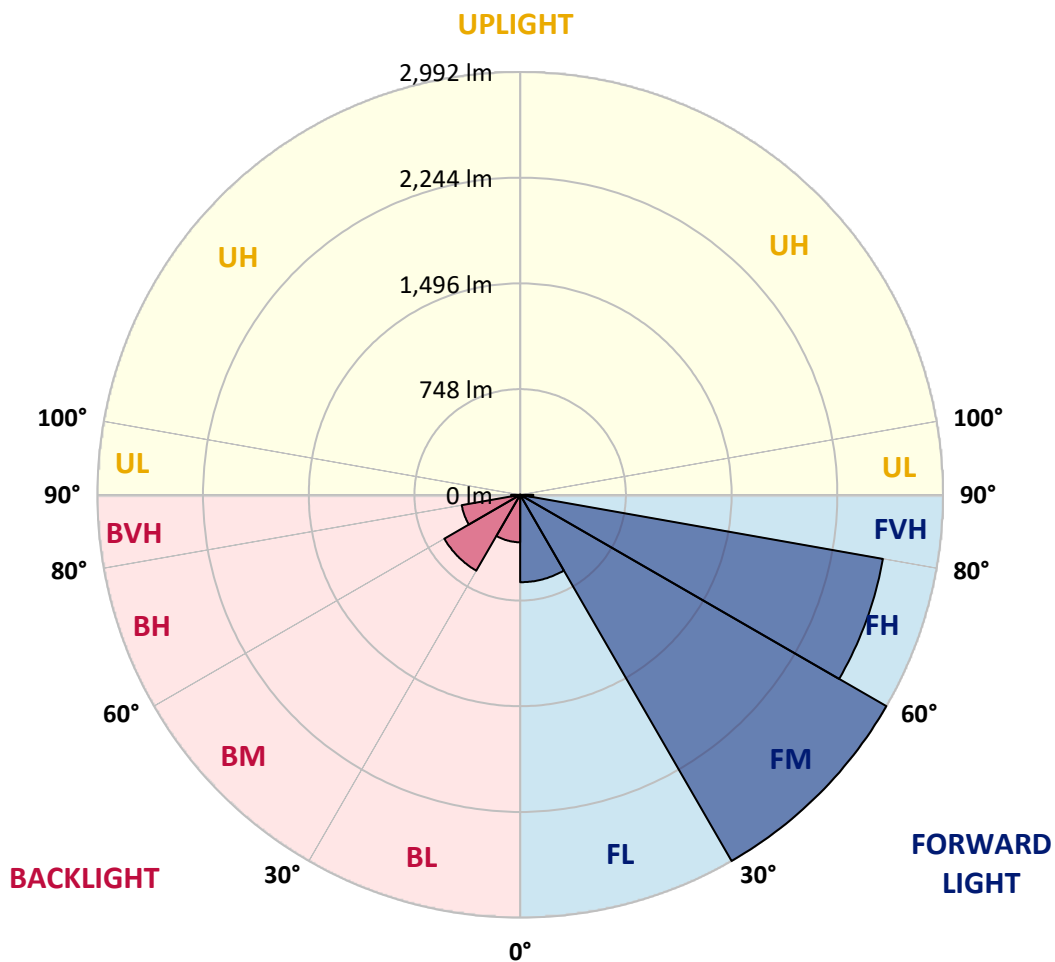
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	618.5	8.0			
FM	(30°-60°)	2991.6	38.6			
FH	(60°-80°)	2605.8	33.6			G2/5000
FVH	(80°-90°)	93.3	1.2			G1/100
BL	(0°-30°)	335.5	4.3	B1/500		
BM	(30°-60°)	620.0	8.0	B1/1000		
BH	(60°-80°)	419.8	5.4	B1/500		G1/500
BVH	(80°-90°)	64.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7
2.5°	1067.0	1061.5	1062.6	1052.6	1047.1	1033.8	1019.4	1003.9	996.2	990.7	971.8
5°	1171.1	1171.1	1175.5	1167.8	1146.7	1124.6	1099.1	1064.8	1050.4	1030.5	992.9
7.5°	1257.4	1259.6	1259.6	1257.4	1238.6	1214.2	1181.0	1139.0	1115.7	1086.9	1028.3
10°	1301.7	1307.2	1311.6	1315.0	1312.8	1298.4	1260.7	1217.6	1185.5	1147.8	1069.2
12.5°	1323.8	1326.0	1333.8	1350.4	1363.7	1374.7	1347.1	1296.1	1264.0	1218.7	1113.5
15°	1348.2	1348.2	1355.9	1376.9	1402.4	1432.3	1429.0	1389.1	1354.8	1298.4	1170.0
17.5°	1363.7	1368.1	1382.5	1404.6	1440.0	1489.9	1515.3	1493.2	1448.9	1389.1	1230.8
20°	1354.8	1358.1	1386.9	1430.1	1475.5	1539.7	1603.9	1603.9	1561.8	1493.2	1298.4
22.5°	1371.4	1376.9	1396.9	1437.8	1499.8	1582.8	1688.0	1724.5	1688.0	1612.7	1376.9
25°	1435.6	1433.4	1450.0	1466.6	1519.7	1622.7	1759.9	1854.0	1820.8	1737.8	1453.3
27.5°	1528.6	1528.6	1537.4	1536.3	1555.2	1655.9	1823.0	1968.0	1940.3	1840.7	1516.4
30°	1636.0	1638.2	1636.0	1634.9	1631.5	1701.3	1879.5	2069.9	2055.5	1957.0	1574.0
32.5°	1766.6	1772.1	1763.2	1741.1	1727.8	1766.6	1927.1	2183.9	2188.3	2072.1	1630.4
35°	1930.4	1939.2	1906.0	1873.9	1840.7	1858.4	1982.4	2291.2	2335.5	2202.7	1699.0
37.5°	2094.2	2108.6	2103.1	2016.7	1970.2	1969.1	2064.3	2425.2	2499.3	2373.1	1796.5
40°	2232.6	2244.7	2251.4	2172.8	2108.6	2106.4	2185.0	2564.6	2700.8	2569.1	1911.6
42.5°	2324.4	2335.5	2355.4	2308.9	2249.2	2276.8	2317.8	2703.0	2917.7	2808.1	2053.2
45°	2424.1	2432.9	2445.1	2418.5	2387.5	2467.2	2486.0	2856.8	3134.7	3064.9	2219.3
47.5°	2530.3	2539.2	2545.8	2525.9	2514.8	2626.6	2651.0	3014.0	3353.8	3330.6	2380.9
50°	2647.6	2651.0	2657.6	2647.6	2651.0	2771.6	2787.1	3152.4	3527.6	3607.3	2549.1
52.5°	2849.1	2853.5	2855.7	2808.1	2791.5	2863.5	2896.7	3299.6	3680.4	3837.5	2697.4
55°	3008.5	3024.0	3093.7	3062.7	3022.9	2928.8	2987.4	3418.0	3788.8	4052.3	2852.4
57.5°	2877.9	2913.3	3087.1	3233.2	3345.0	3120.3	3094.8	3539.8	3913.9	4237.1	3032.8
60°	2498.2	2550.2	2802.6	3107.0	3468.9	3559.7	3315.1	3691.4	4050.0	4429.7	3226.5
62.5°	1732.3	1785.4	2134.0	2620.0	3259.7	3811.0	3918.3	3960.4	4239.3	4626.7	3478.9
65°	830.2	884.4	1172.2	1684.7	2574.6	3649.4	4621.2	4518.3	4558.1	4876.9	3850.8
67.5°	528.0	556.8	669.7	917.6	1497.6	2842.4	4873.6	5629.6	5313.0	5453.6	4591.3
70°	386.3	392.9	490.3	635.3	888.8	1660.3	4303.5	6693.3	6445.3	6429.8	5484.6
72°	285.6	296.6	371.9	506.9	657.5	970.7	3202.2	6563.8	6930.1	6782.9	5431.4
72.5°	269.0	277.8	343.1	479.3	621.0	852.3	2869.0	6413.2	6870.4	6792.9	5329.6
75°	195.9	202.6	234.7	340.9	480.4	493.7	1531.9	4922.3	5834.3	6485.2	4831.5
77.5°	135.0	139.5	156.1	209.2	328.7	334.3	649.7	3360.5	4210.5	5185.7	3715.8
80°	81.9	84.1	94.1	114.0	209.2	198.1	267.9	1756.6	2197.1	2819.2	1723.4
82.5°	34.3	35.4	41.0	45.4	88.5	94.1	108.5	573.4	727.2	881.1	497.0
85°	0.0	0.0	1.1	1.1	2.2	10.0	15.5	70.8	107.4	128.4	89.7
87.5°	0.0	0.0	1.1	1.1	1.1	2.2	2.2	3.3	4.4	4.4	6.6
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7
2.5°	963.0	958.6	945.3	934.2	925.3	911.0	909.8	898.8	898.8	895.5	893.2
5°	978.5	964.1	937.5	913.2	895.5	874.4	864.5	852.3	844.5	840.1	841.2
7.5°	998.4	974.0	928.7	887.7	854.5	827.9	812.4	802.5	796.9	794.7	794.7
10°	1026.1	988.4	914.3	852.3	810.2	790.3	782.6	781.5	782.6	783.7	784.8
12.5°	1057.1	998.4	887.7	810.2	777.0	769.3	773.7	783.7	792.5	795.8	795.8
15°	1089.2	1005.0	851.2	771.5	751.6	759.3	774.8	793.6	808.0	816.9	819.1
17.5°	1122.4	1006.1	812.4	736.1	729.4	749.4	777.0	806.9	830.2	844.5	846.8
20°	1157.8	1003.9	767.1	704.0	707.3	740.5	779.2	820.2	851.2	870.0	872.2
22.5°	1196.5	995.1	722.8	673.0	688.5	731.6	777.0	824.6	857.8	880.0	884.4
25°	1234.2	977.4	678.5	645.3	675.2	722.8	766.0	806.9	839.0	860.0	865.6
27.5°	1254.1	939.7	636.5	624.3	665.2	709.5	740.5	768.2	785.9	799.2	804.7
30°	1257.4	886.6	602.1	609.9	654.2	690.7	708.4	712.8	709.5	713.9	708.4
32.5°	1250.8	829.0	574.5	598.8	636.5	664.1	668.6	655.3	635.3	607.7	608.8
35°	1246.3	766.0	552.3	583.3	613.2	630.9	623.2	602.1	564.5	531.3	529.1
37.5°	1254.1	708.4	533.5	563.4	583.3	591.1	580.0	552.3	519.1	490.3	487.0
40°	1276.2	666.3	515.8	541.3	551.2	556.8	543.5	519.1	505.8	484.8	481.5
42.5°	1319.4	637.6	499.2	516.9	521.3	526.9	513.6	497.0	509.2	504.7	504.7
45°	1379.2	624.3	484.8	493.7	498.1	506.9	499.2	484.8	498.1	472.6	468.2
47.5°	1456.6	628.7	474.8	470.4	483.7	499.2	490.3	472.6	468.2	422.8	415.1
50°	1538.6	651.9	464.9	451.6	468.2	489.2	478.2	450.5	423.9	400.7	396.3
52.5°	1634.9	690.7	456.0	430.6	450.5	478.2	470.4	440.5	412.9	396.3	392.9
55°	1741.1	728.3	445.0	406.2	427.3	474.8	472.6	433.9	397.4	389.6	387.4
57.5°	1860.7	759.3	431.7	378.6	404.0	464.9	462.7	418.4	392.9	386.3	385.2
60°	2010.1	795.8	408.4	346.5	380.8	446.1	443.9	410.6	383.0	377.4	375.2
62.5°	2213.7	863.4	368.6	316.6	356.4	412.9	426.1	395.2	368.6	367.5	367.5
65°	2549.1	994.0	327.6	291.1	328.7	380.8	402.9	377.4	355.3	360.8	360.8
67.5°	3183.4	1170.0	285.6	266.8	302.2	349.8	383.0	359.7	340.9	352.0	352.0
70°	3672.6	1104.7	252.4	243.5	275.6	322.1	357.5	340.9	323.2	342.0	339.8
72°	3350.5	809.1	230.2	224.7	253.5	298.9	335.4	323.2	304.4	319.9	315.5
72.5°	3216.6	735.0	223.6	219.2	246.8	294.4	331.0	318.8	298.9	314.4	307.7
75°	2805.9	619.8	194.8	192.6	219.2	264.5	302.2	295.5	275.6	284.5	277.8
77.5°	2322.2	522.4	163.8	168.2	187.1	235.8	272.3	265.6	246.8	245.7	244.6
80°	1089.2	291.1	135.0	138.4	157.2	201.5	234.7	230.2	212.5	210.3	207.0
82.5°	315.5	139.5	104.0	106.3	126.2	164.9	201.5	199.2	186.0	182.6	174.9
85°	58.7	45.4	56.5	66.4	91.9	137.3	183.7	179.3	159.4	145.0	133.9
87.5°	3.3	8.9	18.8	32.1	58.7	102.9	148.3	145.0	127.3	109.6	110.7
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)