

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: P401742

Luminaire Tested: **ENV-SA1E-827-U-SL4**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401742  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1E-827-U-SL4  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4903 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.2  
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

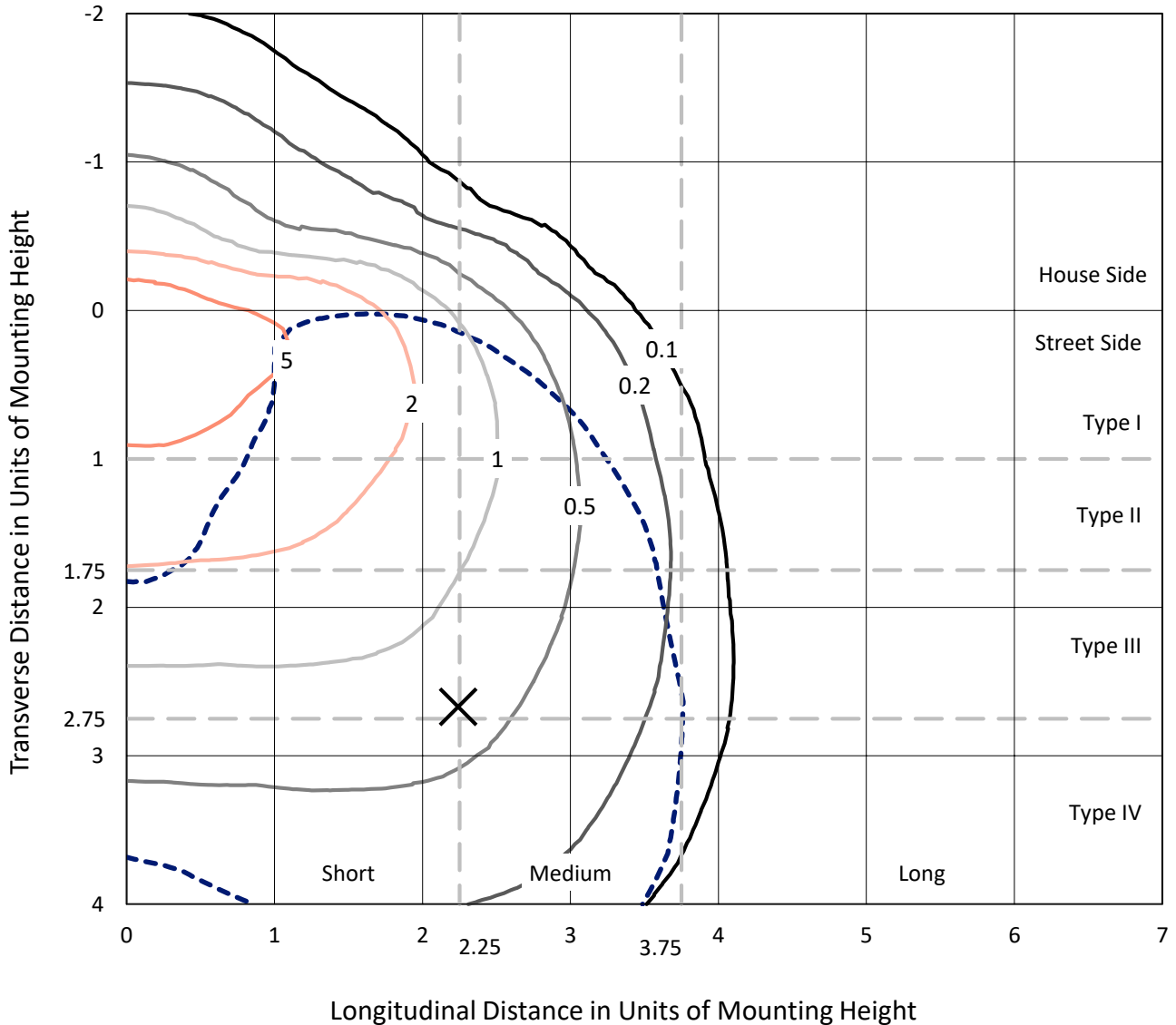


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

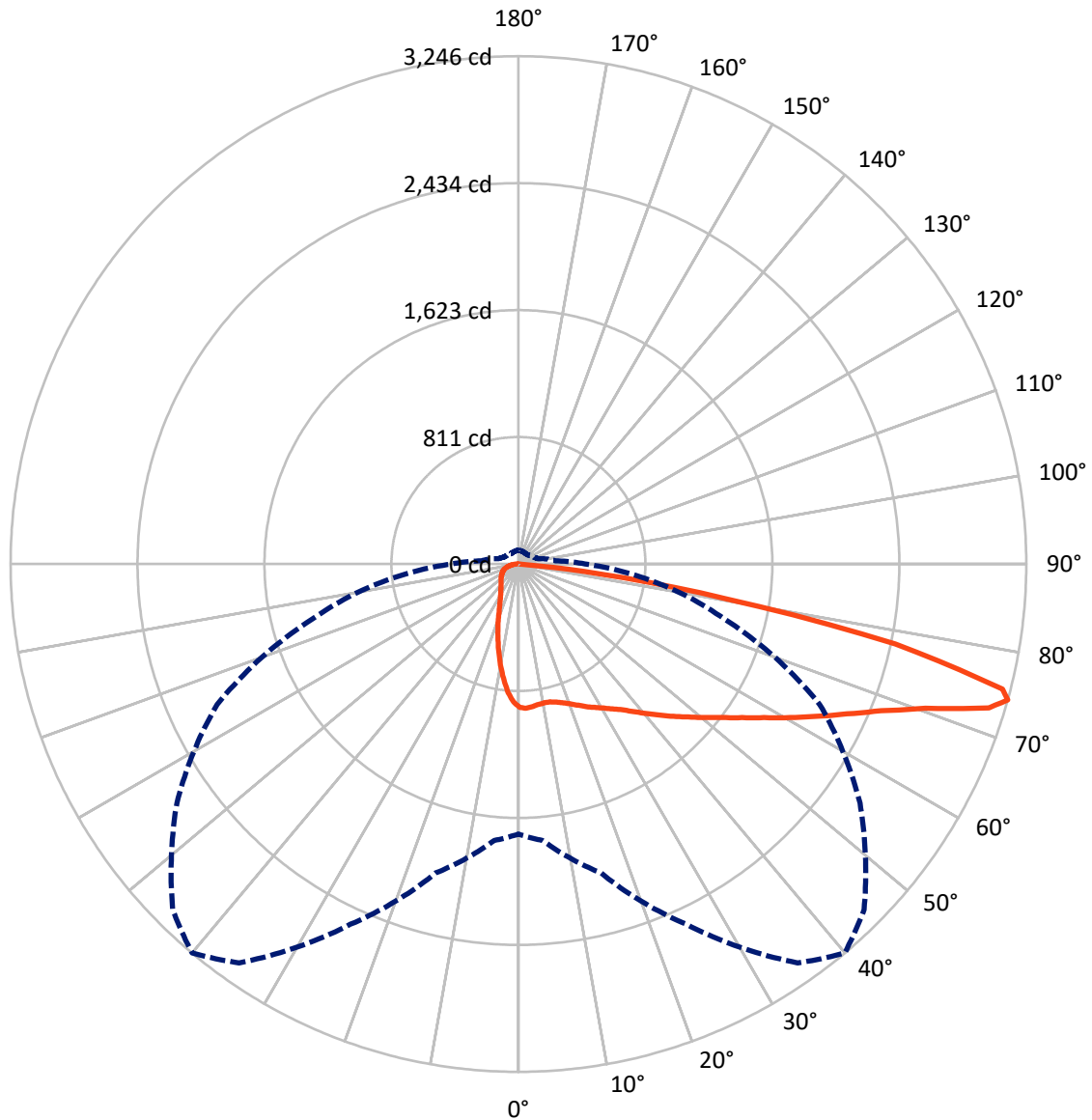


Based on 10 foot mounting height. Maximum calculated value = 9.2 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 74-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	764.5	0.0	764.5
	% Fixture	15.6	0.0	15.6
<b>Street Side</b>	Lumens	4138.5	0.0	4138.5
	% Fixture	84.4	0.0	84.4
<b>Total</b>	Lumens	4903.0	0.0	4903.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	1.6
10°-20°	208.1	4.2
20°-30°	319.1	6.5
30°-40°	460.9	9.4
40°-50°	663.1	13.5
50°-60°	915.6	18.7
60°-70°	1154.3	23.5
70°-80°	1001.0	20.4
80°-90°	100.2	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°	4903.0	100.0
0°-180°	4903.0	100.0



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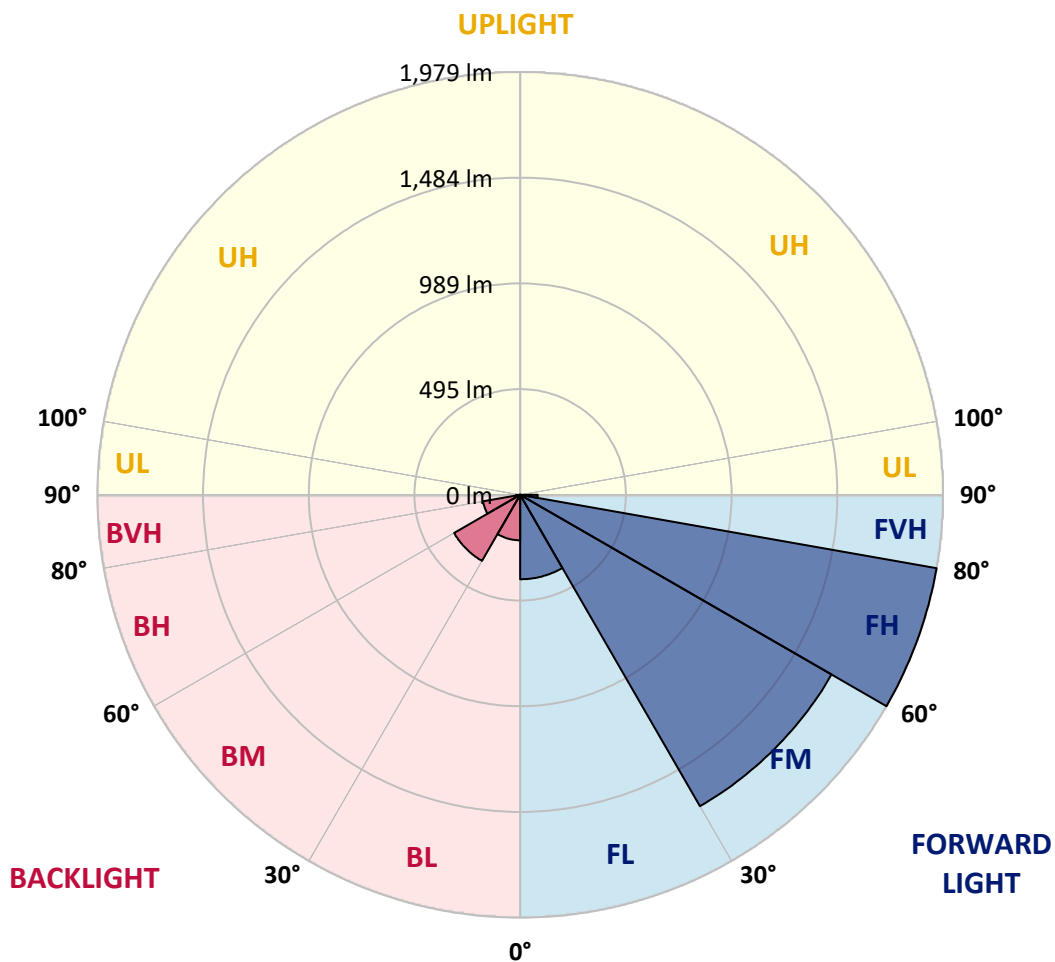
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	395.3	8.1			
FM (30°-60°)	1682.5	34.3			
FH (60°-80°)	1978.8	40.4			G2/5000
FVH (80°-90°)	81.9	1.7			G1/100
BL (0°-30°)	212.7	4.3	B1/500		
BM (30°-60°)	357.0	7.3	B1/1000		
BH (60°-80°)	176.4	3.6	B1/500		G1/500
BVH (80°-90°)	18.3	0.4			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2
2.5°	927.0	926.2	928.4	927.0	924.8	923.3	922.6	918.1	916.7	912.3	906.4
5°	923.3	923.3	923.3	921.8	917.4	915.9	914.5	907.9	903.4	896.1	885.1
7.5°	910.8	913.0	912.3	911.5	907.9	906.4	904.2	896.1	890.2	879.2	865.2
10°	899.0	899.0	899.8	902.7	901.2	902.0	901.2	892.4	884.3	870.4	852.7
12.5°	882.1	885.1	889.5	897.6	901.2	904.2	904.2	897.6	888.7	871.8	851.3
15°	871.8	875.5	886.5	901.2	910.1	915.2	916.7	908.6	897.6	880.7	857.9
17.5°	867.4	871.8	892.4	913.0	928.4	932.9	933.6	924.8	913.0	892.4	866.0
20°	871.8	877.0	904.2	932.1	950.5	954.2	955.6	943.1	928.4	908.6	874.0
22.5°	888.7	896.1	926.2	956.4	975.5	980.6	979.2	961.5	946.8	925.5	884.3
25°	925.5	929.9	957.1	989.5	1004.2	1010.0	1006.4	986.5	967.4	946.1	899.0
27.5°	968.1	974.0	1002.7	1026.9	1036.5	1038.0	1034.3	1013.7	992.4	974.8	921.8
30°	1019.6	1024.7	1048.3	1066.6	1067.4	1068.1	1065.9	1042.4	1024.7	1010.8	954.9
32.5°	1074.0	1074.7	1099.0	1107.8	1101.9	1104.1	1101.9	1076.2	1063.7	1059.3	998.3
35°	1124.0	1124.7	1149.7	1152.6	1143.1	1143.8	1148.2	1118.1	1118.1	1128.4	1063.0
37.5°	1171.8	1174.0	1196.0	1193.1	1189.4	1196.0	1201.9	1176.2	1190.9	1220.3	1141.6
40°	1207.8	1212.9	1242.3	1240.9	1248.9	1255.6	1260.7	1247.5	1271.0	1328.3	1238.7
42.5°	1231.3	1241.6	1283.5	1293.8	1307.8	1319.5	1328.3	1327.6	1368.8	1448.2	1341.6
45°	1255.6	1265.9	1321.7	1346.7	1370.2	1388.6	1405.5	1414.3	1479.8	1574.6	1461.4
47.5°	1285.0	1293.8	1356.3	1405.5	1435.7	1460.7	1490.8	1509.9	1593.0	1703.2	1572.4
50°	1329.8	1335.7	1391.6	1468.0	1506.2	1540.8	1578.3	1617.2	1715.0	1834.8	1669.4
52.5°	1387.9	1391.6	1432.7	1531.2	1592.2	1629.0	1684.9	1736.3	1839.2	1953.9	1748.8
55°	1454.0	1451.1	1482.7	1606.9	1678.2	1733.4	1802.5	1854.7	1970.1	2057.6	1812.0
57.5°	1520.2	1518.0	1543.0	1679.7	1787.0	1851.7	1923.0	1978.2	2089.9	2154.6	1857.6
60°	1583.4	1575.3	1610.6	1765.0	1918.6	1992.9	2056.8	2107.6	2203.1	2224.4	1881.9
62.5°	1639.3	1639.3	1690.7	1870.1	2075.9	2142.8	2193.6	2227.4	2311.2	2275.9	1872.3
65°	1690.7	1697.4	1770.9	1987.7	2239.1	2307.5	2351.6	2364.8	2418.5	2278.1	1791.5
67.5°	1748.8	1759.1	1862.8	2125.2	2427.3	2500.1	2538.3	2533.9	2495.0	2244.3	1618.0
70°	1805.4	1822.3	1976.7	2302.4	2659.6	2758.1	2800.0	2713.3	2534.6	2056.8	1343.8
72.5°	1846.6	1875.3	2070.1	2479.5	2992.6	3144.1	3127.1	2762.5	2348.7	1695.2	1016.7
74°	1726.0	1773.8	2044.3	2540.5	3112.4	3245.5	3124.2	2664.8	2124.5	1365.1	720.4
75°	1585.6	1631.9	1914.2	2516.3	3135.2	3194.8	2972.8	2492.7	1905.4	1057.8	470.5
77.5°	1174.0	1210.0	1470.2	1984.1	2479.5	2461.9	2213.4	1689.3	938.7	319.0	198.5
80°	518.3	545.4	725.6	998.3	1343.0	1337.9	1246.0	776.3	302.9	166.9	121.3
82.5°	156.6	155.8	208.8	291.1	510.2	519.7	441.8	267.6	144.8	69.1	58.8
85°	0.7	0.7	0.7	0.7	2.2	19.1	16.2	51.5	26.5	12.5	21.3
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2	915.2
2.5°	902.7	902.0	899.8	894.6	890.9	879.9	883.6	876.2	875.5	874.0	873.3
5°	879.9	877.0	868.2	857.9	846.1	827.7	821.8	810.8	804.2	802.0	803.5
7.5°	856.4	849.8	832.9	810.8	787.3	760.1	740.3	724.8	713.8	710.1	705.0
10°	841.7	830.7	802.0	765.2	727.0	688.8	655.7	632.9	616.0	602.8	602.8
12.5°	836.6	821.8	779.9	726.3	671.2	616.8	569.0	538.8	510.2	496.2	494.0
15°	839.5	818.9	761.6	691.0	617.5	546.9	488.1	444.7	417.5	400.6	406.5
17.5°	842.4	816.7	742.5	653.5	565.3	483.7	415.3	366.1	333.0	324.2	320.5
20°	846.1	812.3	718.2	613.1	511.6	422.7	350.6	300.7	275.7	264.6	264.6
22.5°	851.3	806.4	693.2	568.2	456.5	363.1	296.2	258.8	238.9	232.3	232.3
25°	858.6	802.7	667.5	523.4	404.3	316.1	260.2	230.8	220.5	216.1	215.4
27.5°	872.6	803.5	642.5	477.8	352.9	276.4	234.5	215.4	207.3	205.1	204.4
30°	893.9	810.8	616.0	429.3	307.3	246.3	216.9	203.6	198.5	197.0	197.0
32.5°	923.3	824.1	594.0	385.9	273.5	222.0	202.2	193.3	190.4	188.9	189.7
35°	968.9	846.8	567.5	346.2	241.9	205.1	190.4	183.8	181.6	181.6	182.3
37.5°	1028.4	882.1	541.8	309.5	220.5	190.4	179.4	175.7	173.5	175.0	175.7
40°	1103.4	924.0	517.5	276.4	202.9	178.6	169.8	166.9	166.1	167.6	169.1
42.5°	1184.3	974.8	495.5	249.2	188.9	169.1	161.7	160.3	159.5	160.3	162.5
45°	1278.4	1032.8	477.1	228.6	178.6	161.0	154.4	152.9	152.2	153.6	155.1
47.5°	1365.1	1085.0	462.4	214.7	169.8	155.1	148.5	146.3	146.3	146.3	147.8
50°	1435.7	1126.2	453.6	205.1	162.5	148.5	142.6	140.4	139.7	138.9	139.7
52.5°	1496.7	1157.1	450.6	199.2	156.6	142.6	136.7	135.3	133.8	132.3	133.1
55°	1537.1	1172.5	444.7	194.1	151.4	136.0	130.8	129.4	127.9	125.7	125.7
57.5°	1560.6	1171.0	431.5	191.1	148.5	130.1	125.0	125.0	123.5	119.8	120.6
60°	1562.8	1145.3	399.2	187.5	146.3	124.2	118.4	119.8	119.8	116.9	116.9
62.5°	1525.3	1077.7	336.7	177.9	143.3	119.8	113.2	116.9	118.4	115.4	115.4
65°	1409.9	918.1	270.5	163.9	136.0	114.7	107.3	114.7	119.1	116.9	116.1
67.5°	1188.7	727.0	223.5	148.5	127.9	108.1	101.4	111.0	116.9	116.9	116.1
70°	954.2	552.1	183.8	131.6	115.4	100.0	94.8	102.9	108.1	109.5	109.5
72.5°	657.2	337.4	149.2	113.2	101.4	90.4	86.0	91.2	94.1	97.0	96.3
74°	424.2	236.7	130.8	102.9	92.6	83.1	80.9	83.1	84.5	87.5	88.2
75°	283.8	193.3	122.0	95.6	87.5	77.9	76.5	78.7	80.1	82.3	82.3
77.5°	163.2	138.2	98.5	79.4	72.8	66.9	66.2	66.9	69.1	71.3	70.6
80°	113.2	105.1	77.9	61.7	57.3	54.4	55.1	55.9	59.5	60.3	59.5
82.5°	68.4	75.7	55.1	46.3	43.4	42.6	44.8	46.3	49.3	50.0	49.3
85°	27.2	36.0	27.2	25.7	28.7	31.6	35.3	37.5	39.0	39.0	39.0
87.5°	0.0	5.1	6.6	10.3	16.2	19.1	25.0	27.2	28.7	27.9	27.2
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)