

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: P401760

Luminaire Tested: **ENT-SA1E-830-U-SL4**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401760  
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: ENT-SA1E-830-U-SL4  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 3000K, 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: 5300 lumens  
Efficiency: N/A  
Efficacy: 92.7 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

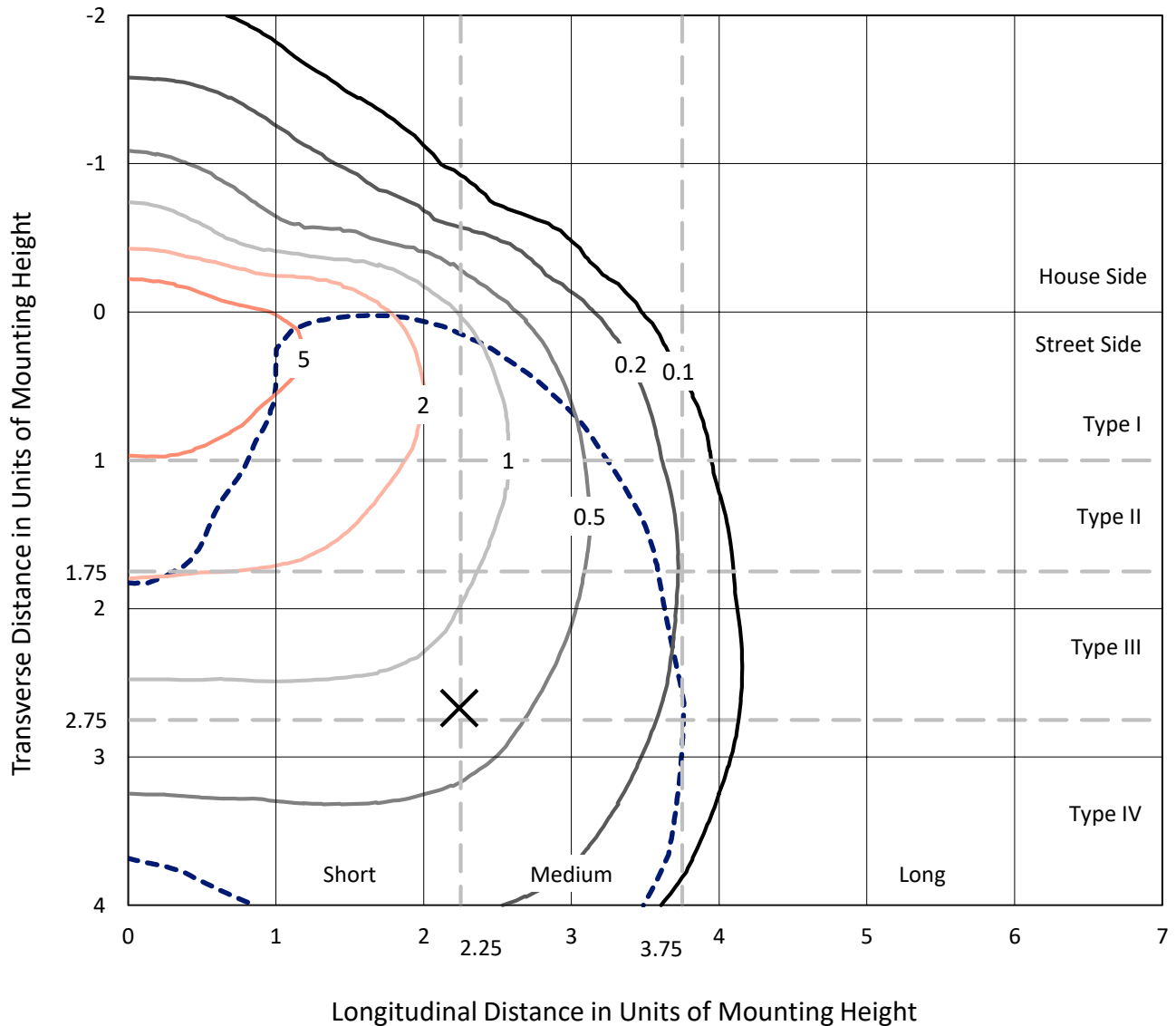
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

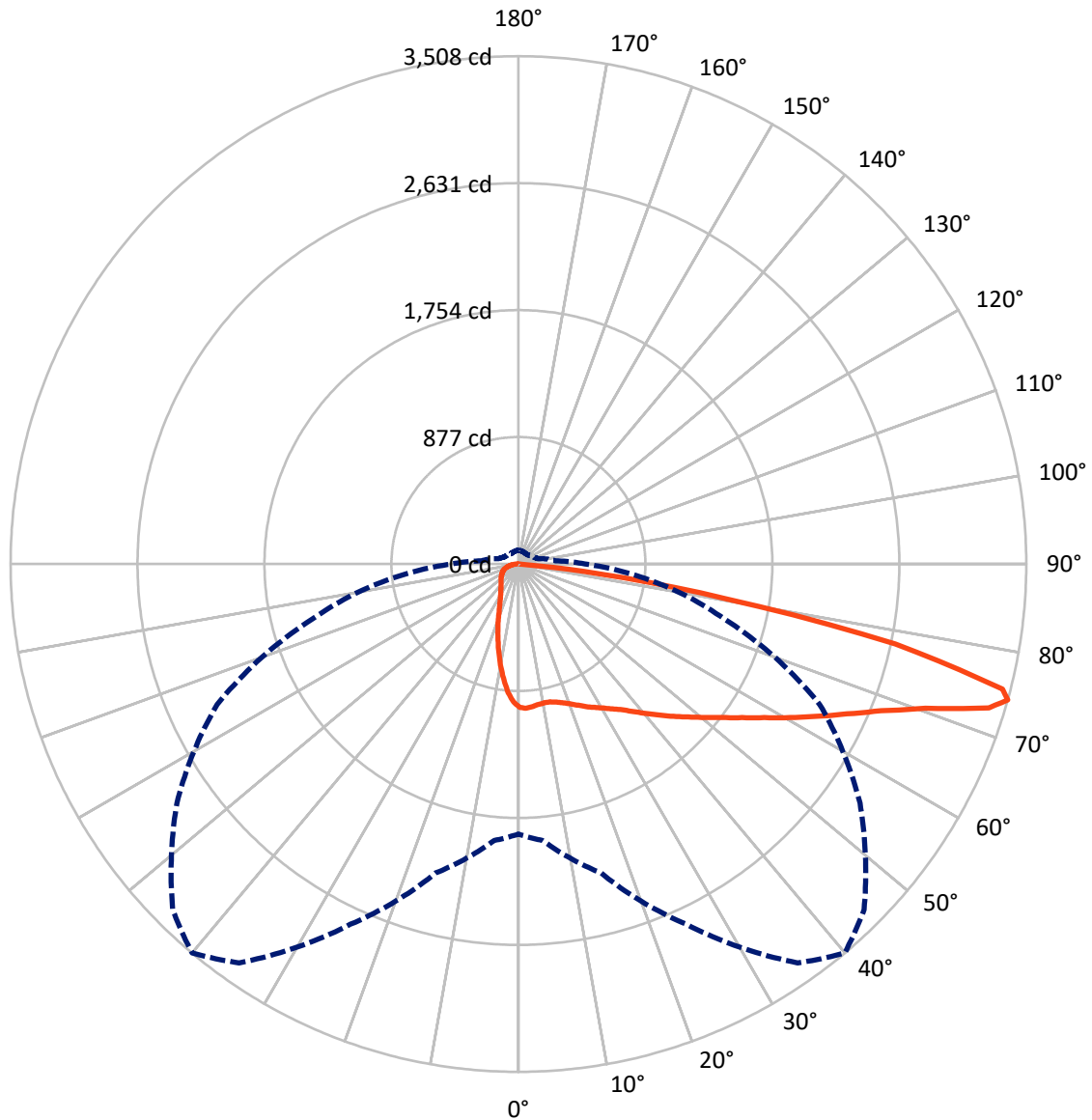
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.9 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	826.4	0.0	826.4
	% Fixture	15.6	0.0	15.6
<b>Street Side</b>	Lumens	4473.6	0.0	4473.6
	% Fixture	84.4	0.0	84.4
<b>Total</b>	Lumens	5300.0	0.0	5300.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.3	1.6
10°-20°	224.9	4.2
20°-30°	345.0	6.5
30°-40°	498.2	9.4
40°-50°	716.8	13.5
50°-60°	989.7	18.7
60°-70°	1247.8	23.5
70°-80°	1082.0	20.4
80°-90°	108.3	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°	5300.0	100.0
0°-180°	5300.0	100.0



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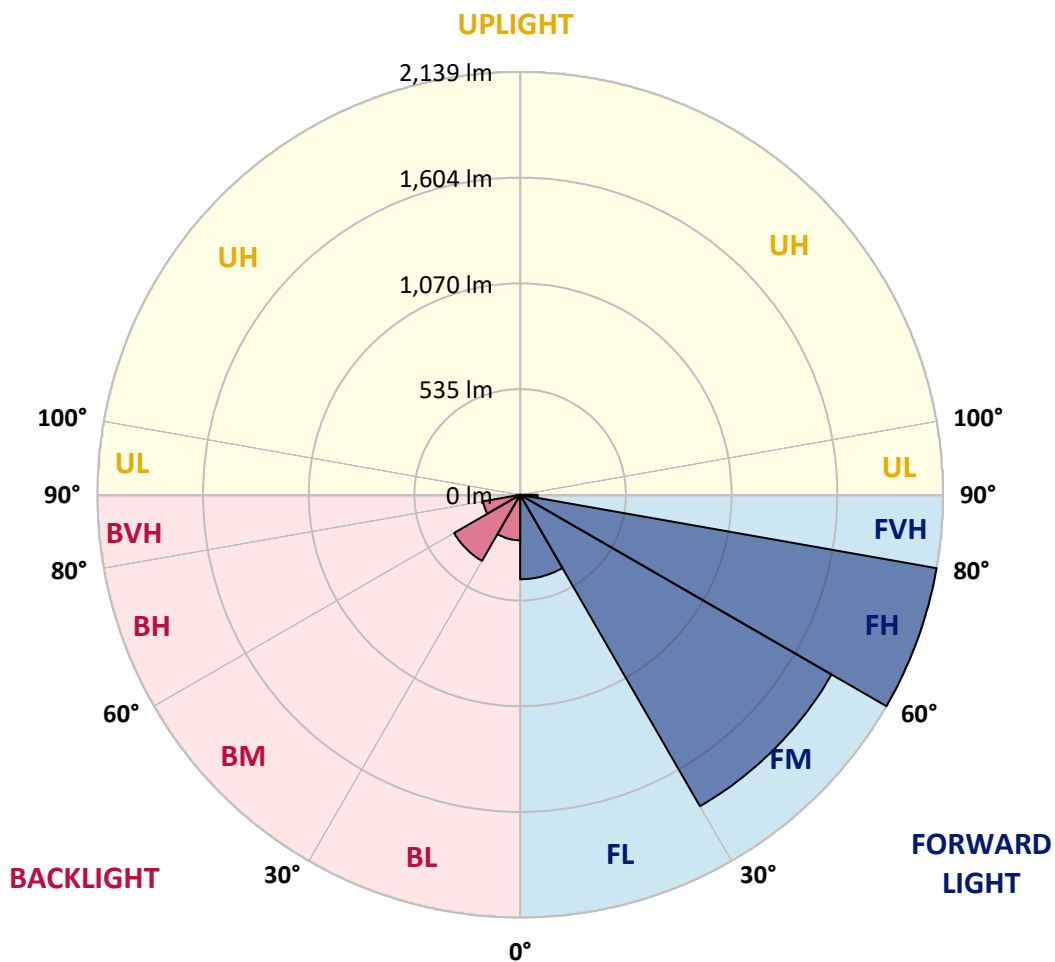
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	427.3	8.1			
FM (30°-60°)	1818.7	34.3			
FH (60°-80°)	2139.1	40.4			G2/5000
FVH (80°-90°)	88.6	1.7			G1/100
BL (0°-30°)	230.0	4.3	B1/500		
BM (30°-60°)	385.9	7.3	B1/1000		
BH (60°-80°)	190.7	3.6	B1/500		G1/500
BVH (80°-90°)	19.8	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°	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3
2.5°	1002.0	1001.2	1003.6	1002.0	999.6	998.1	997.3	992.5	990.9	986.1	979.8
5°	998.1	998.1	998.1	996.5	991.7	990.1	988.5	981.4	976.6	968.7	956.7
7.5°	984.5	986.9	986.1	985.3	981.4	979.8	977.4	968.7	962.3	950.4	935.3
10°	971.8	971.8	972.6	975.8	974.2	975.0	974.2	964.7	955.9	940.8	921.8
12.5°	953.6	956.7	961.5	970.2	974.2	977.4	977.4	970.2	960.7	942.4	920.2
15°	942.4	946.4	958.3	974.2	983.8	989.3	990.9	982.2	970.2	952.0	927.3
17.5°	937.7	942.4	964.7	986.9	1003.6	1008.4	1009.2	999.6	986.9	964.7	936.1
20°	942.4	948.0	977.4	1007.6	1027.5	1031.4	1033.0	1019.5	1003.6	982.2	944.8
22.5°	960.7	968.7	1001.2	1033.8	1054.5	1060.0	1058.4	1039.4	1023.5	1000.4	955.9
25°	1000.4	1005.2	1034.6	1069.6	1085.5	1091.8	1087.8	1066.4	1045.7	1022.7	971.8
27.5°	1046.5	1052.9	1083.9	1110.1	1120.4	1122.0	1118.0	1095.8	1072.7	1053.7	996.5
30°	1102.2	1107.7	1133.1	1153.0	1153.8	1154.6	1152.2	1126.8	1107.7	1092.6	1032.2
32.5°	1161.0	1161.7	1188.0	1197.5	1191.1	1193.5	1191.1	1163.3	1149.8	1145.1	1079.1
35°	1215.0	1215.8	1242.8	1246.0	1235.6	1236.4	1241.2	1208.6	1208.6	1219.8	1149.0
37.5°	1266.6	1269.0	1292.9	1289.7	1285.7	1292.9	1299.2	1271.4	1287.3	1319.1	1234.1
40°	1305.6	1311.1	1342.9	1341.3	1350.1	1357.2	1362.8	1348.5	1373.9	1435.9	1339.0
42.5°	1331.0	1342.1	1387.4	1398.5	1413.6	1426.4	1435.9	1435.1	1479.6	1565.4	1450.2
45°	1357.2	1368.4	1428.7	1455.8	1481.2	1501.1	1519.3	1528.9	1599.6	1702.1	1579.7
47.5°	1389.0	1398.5	1466.1	1519.3	1551.9	1578.9	1611.5	1632.2	1722.0	1841.2	1699.7
50°	1437.5	1443.8	1504.2	1586.9	1628.2	1665.5	1706.1	1748.2	1853.9	1983.4	1804.6
52.5°	1500.3	1504.2	1548.7	1655.2	1721.2	1760.9	1821.3	1876.9	1988.2	2112.1	1890.4
55°	1571.8	1568.6	1602.8	1737.1	1814.1	1873.7	1948.4	2004.8	2129.6	2224.2	1958.8
57.5°	1643.3	1640.9	1667.9	1815.7	1931.7	2001.7	2078.8	2138.3	2259.1	2329.1	2008.0
60°	1711.6	1702.9	1741.0	1907.9	2074.0	2154.2	2223.4	2278.2	2381.5	2404.5	2034.3
62.5°	1772.0	1772.0	1827.6	2021.5	2244.0	2316.3	2371.2	2407.7	2498.3	2460.2	2023.9
65°	1827.6	1834.8	1914.3	2148.7	2420.4	2494.3	2542.0	2556.3	2614.3	2462.6	1936.5
67.5°	1890.4	1901.5	2013.6	2297.3	2623.9	2702.5	2743.9	2739.1	2697.0	2426.0	1749.0
70°	1951.6	1969.9	2136.8	2488.8	2875.0	2981.4	3026.7	2933.0	2739.9	2223.4	1452.6
72.5°	1996.1	2027.1	2237.7	2680.3	3234.9	3398.6	3380.4	2986.2	2538.8	1832.4	1099.0
74°	1865.8	1917.4	2209.9	2746.2	3364.5	3508.3	3377.2	2880.5	2296.5	1475.6	778.7
75°	1714.0	1764.1	2069.2	2720.0	3389.1	3453.5	3213.5	2694.6	2059.7	1143.5	508.6
77.5°	1269.0	1308.0	1589.3	2144.7	2680.3	2661.2	2392.6	1826.1	1014.7	344.9	214.5
80°	560.2	589.6	784.3	1079.1	1451.8	1446.2	1346.9	839.1	327.4	180.4	131.1
82.5°	169.3	168.5	225.7	314.7	551.5	561.8	477.6	289.2	156.5	74.7	63.6
85°	0.8	0.8	0.8	0.8	2.4	20.7	17.5	55.6	28.6	13.5	23.0
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	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°	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3
2.5°	975.8	975.0	972.6	967.1	963.1	951.2	955.1	947.2	946.4	944.8	944.0
5°	951.2	948.0	938.5	927.3	914.6	894.8	888.4	876.5	869.3	866.9	868.5
7.5°	925.7	918.6	900.3	876.5	851.0	821.6	800.2	783.5	771.6	767.6	762.0
10°	909.9	897.9	866.9	827.2	785.9	744.6	708.8	684.2	665.9	651.6	651.6
12.5°	904.3	888.4	843.1	785.1	725.5	666.7	615.0	582.5	551.5	536.4	534.0
15°	907.5	885.2	823.2	747.0	667.5	591.2	527.6	480.8	451.3	433.1	439.4
17.5°	910.6	882.8	802.6	706.4	611.1	522.9	449.0	395.7	360.0	350.4	346.5
20°	914.6	878.1	776.4	662.7	553.1	456.9	379.0	325.0	298.0	286.1	286.1
22.5°	920.2	871.7	749.3	614.2	493.5	392.5	320.2	279.7	258.3	251.1	251.1
25°	928.1	867.7	721.5	565.8	437.0	341.7	281.3	249.5	238.4	233.6	232.8
27.5°	943.2	868.5	694.5	516.5	381.4	298.8	253.5	232.8	224.1	221.7	220.9
30°	966.3	876.5	665.9	464.1	332.2	266.2	234.4	220.1	214.5	213.0	213.0
32.5°	998.1	890.8	642.1	417.2	295.6	240.0	218.5	209.0	205.8	204.2	205.0
35°	1047.3	915.4	613.5	374.3	261.4	221.7	205.8	198.7	196.3	196.3	197.1
37.5°	1111.7	953.6	585.6	334.5	238.4	205.8	193.9	189.9	187.5	189.1	189.9
40°	1192.7	998.8	559.4	298.8	219.3	193.1	183.6	180.4	179.6	181.2	182.8
42.5°	1280.1	1053.7	535.6	269.4	204.2	182.8	174.8	173.2	172.4	173.2	175.6
45°	1381.9	1116.5	515.7	247.1	193.1	174.0	166.9	165.3	164.5	166.1	167.7
47.5°	1475.6	1172.9	499.8	232.0	183.6	167.7	160.5	158.1	158.1	158.1	159.7
50°	1551.9	1217.4	490.3	221.7	175.6	160.5	154.2	151.8	151.0	150.2	151.0
52.5°	1617.9	1250.7	487.1	215.3	169.3	154.2	147.8	146.2	144.6	143.0	143.8
55°	1661.6	1267.4	480.8	209.8	163.7	147.0	141.4	139.9	138.3	135.9	135.9
57.5°	1687.0	1265.8	466.4	206.6	160.5	140.6	135.1	135.1	133.5	129.5	130.3
60°	1689.4	1238.0	431.5	202.6	158.1	134.3	127.9	129.5	129.5	126.3	126.3
62.5°	1648.9	1164.9	363.9	192.3	155.0	129.5	122.4	126.3	127.9	124.8	124.8
65°	1524.1	992.5	292.4	177.2	147.0	124.0	116.0	124.0	128.7	126.3	125.6
67.5°	1284.9	785.9	241.6	160.5	138.3	116.8	109.7	120.0	126.3	126.3	125.6
70°	1031.4	596.8	198.7	142.2	124.8	108.1	102.5	111.2	116.8	118.4	118.4
72.5°	710.4	364.7	161.3	122.4	109.7	97.7	93.0	98.5	101.7	104.9	104.1
74°	458.5	255.9	141.4	111.2	100.1	89.8	87.4	89.8	91.4	94.6	95.4
75°	306.7	209.0	131.9	103.3	94.6	84.2	82.6	85.0	86.6	89.0	89.0
77.5°	176.4	149.4	106.5	85.8	78.7	72.3	71.5	72.3	74.7	77.1	76.3
80°	122.4	113.6	84.2	66.7	62.0	58.8	59.6	60.4	64.4	65.2	64.4
82.5°	73.9	81.8	59.6	50.1	46.9	46.1	48.5	50.1	53.2	54.0	53.2
85°	29.4	38.9	29.4	27.8	31.0	34.2	38.1	40.5	42.1	42.1	42.1
87.5°	0.0	5.6	7.2	11.1	17.5	20.7	27.0	29.4	31.0	30.2	29.4
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)