

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: P140291

Luminaire Tested: **ECM-E04-LED-E1-5MQ-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140291
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33686)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E04-LED-E1-5MQ-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12534 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

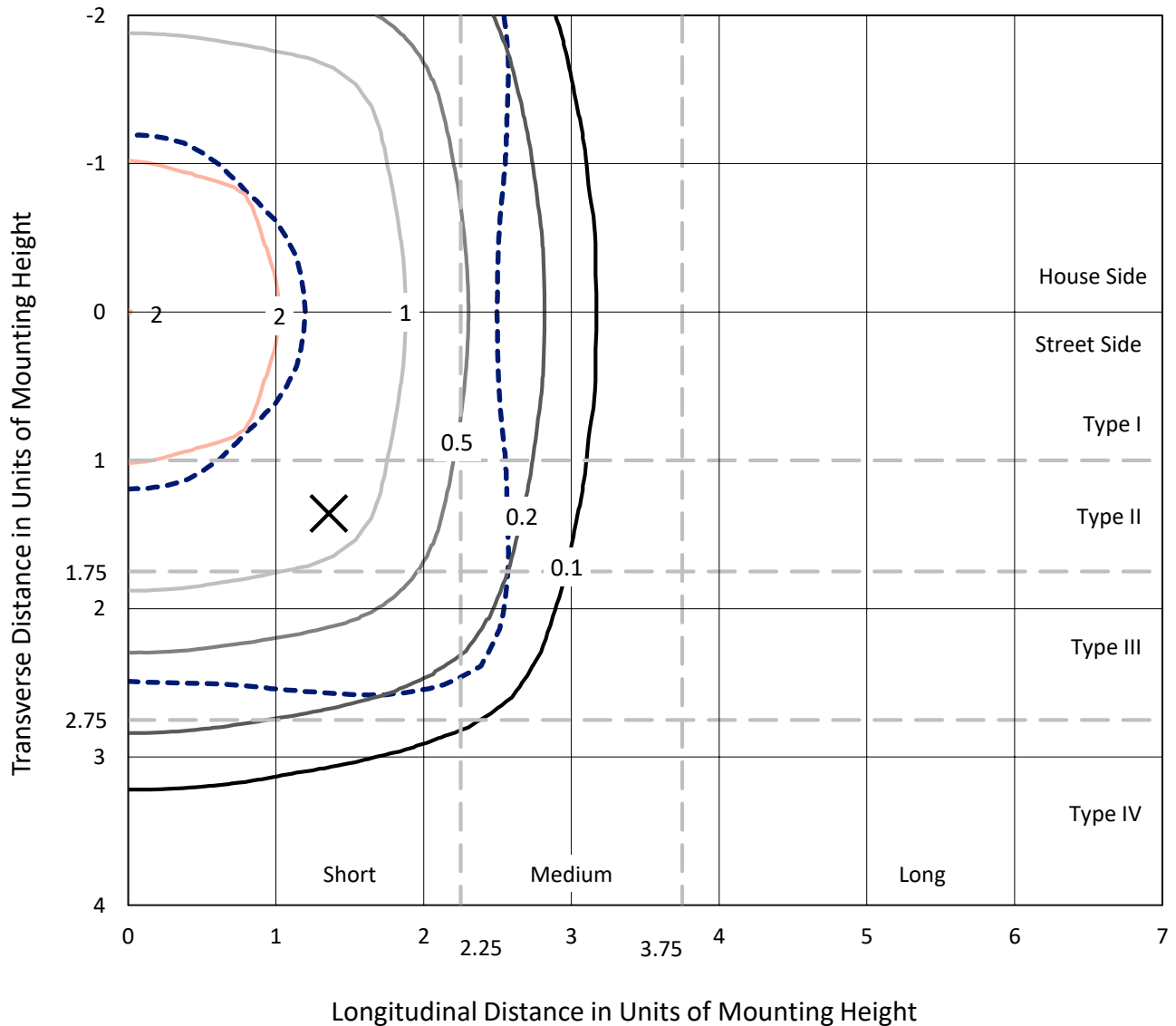
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

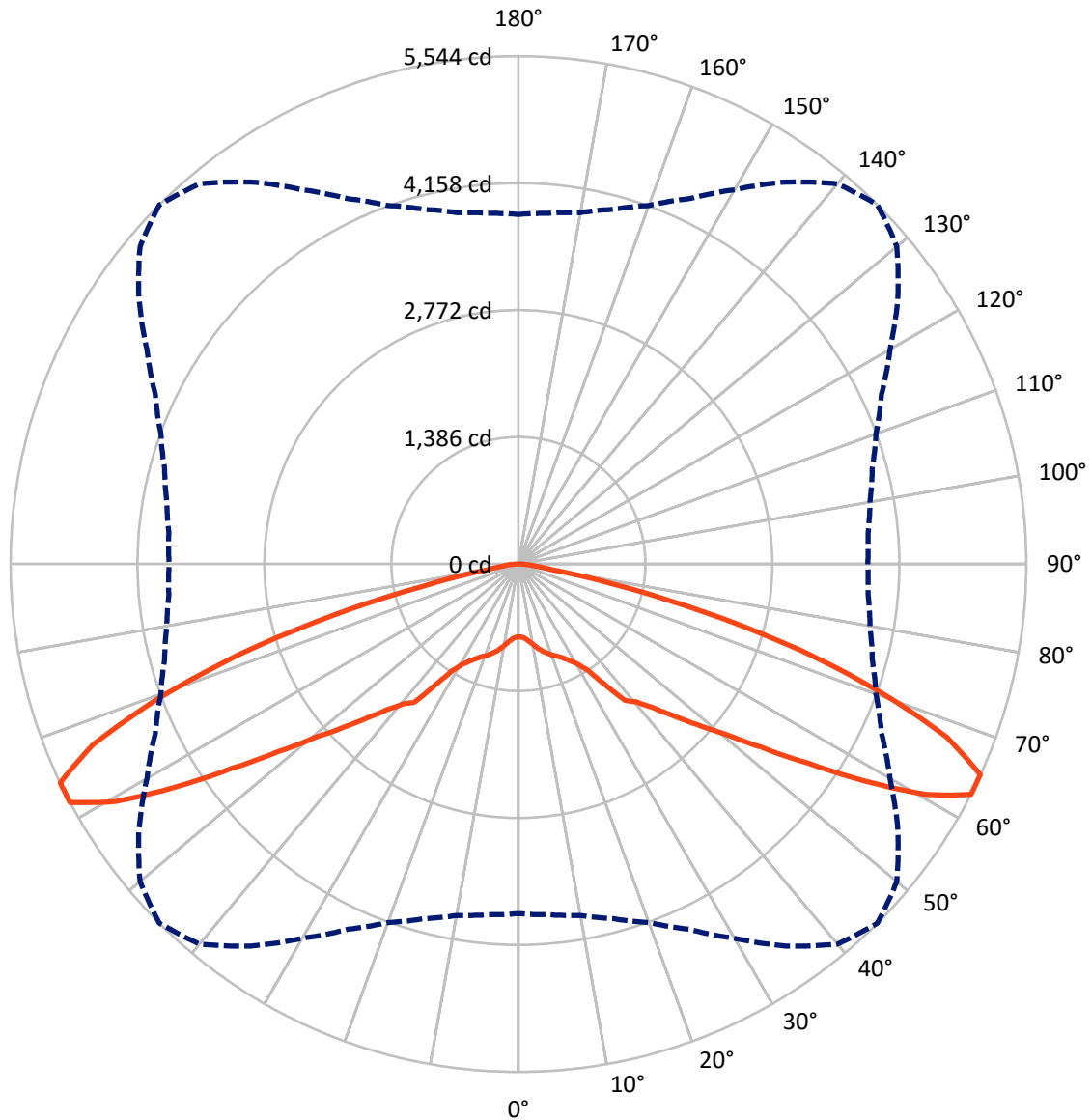
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.3 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6267.0	0.0	6267.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6267.0	0.0	6267.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	12534.0	0.0	12534.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	0.6
10°-20°	281.6	2.2
20°-30°	541.0	4.3
30°-40°	1040.7	8.3
40°-50°	1811.4	14.5
50°-60°	3253.5	26.0
60°-70°	3988.3	31.8
70°-80°	1406.5	11.2
80°-90°	130.1	1.0
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°	12534.0	100.0
0°-180°	12534.0	100.0



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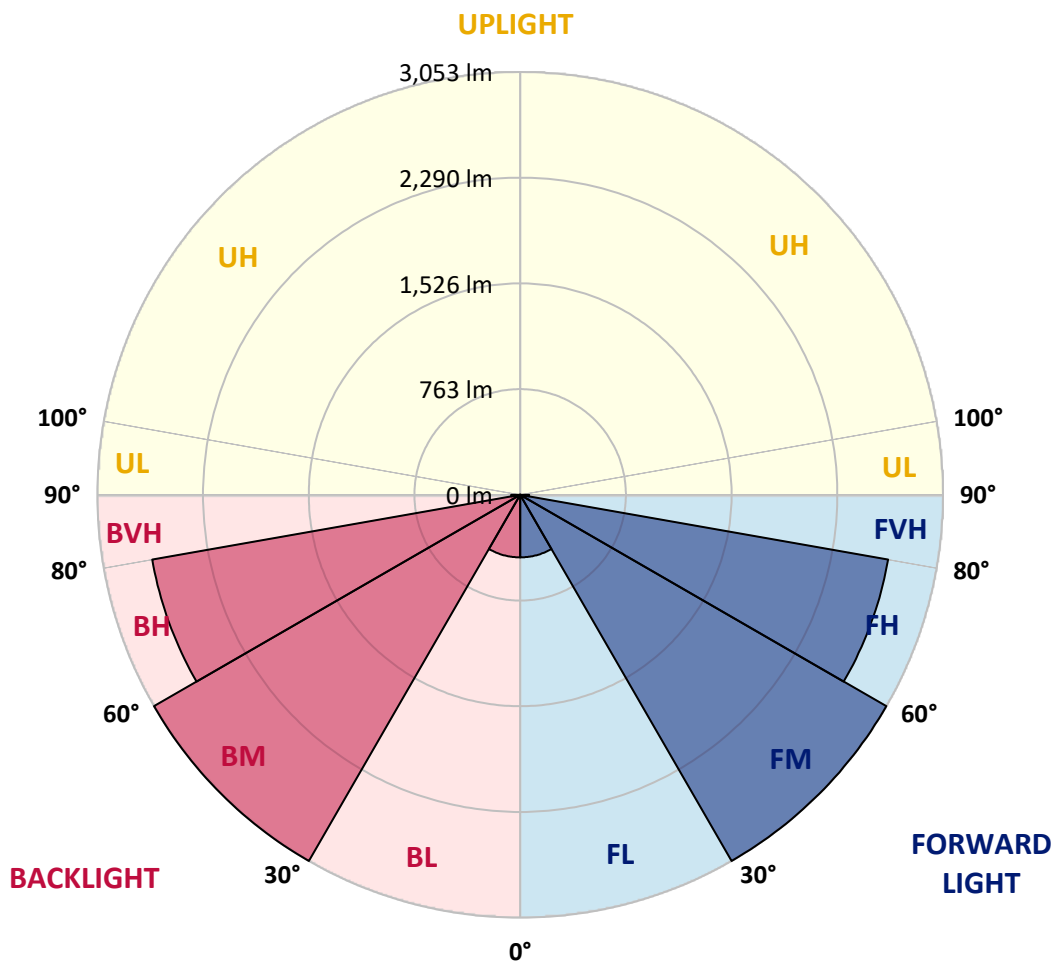
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	451.7	3.6			
FM	(30°-60°)	3052.8	24.4			
FH	(60°-80°)	2697.4	21.5			G2/5000
FVH	(80°-90°)	65.0	0.5			G1/100
BL	(0°-30°)	451.7	3.6	B1/500		
BM	(30°-60°)	3052.8	24.4	B3/5000		
BH	(60°-80°)	2697.4	21.5	B4/5000		G2/5000
BVH	(80°-90°)	65.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9
2.5°	804.5	804.5	803.1	801.7	801.7	801.7	800.4	800.4	801.7	799.0	799.0
5°	825.0	826.4	825.0	823.6	822.3	822.3	820.9	820.9	822.3	819.5	818.1
7.5°	863.3	864.7	861.9	860.6	859.2	857.8	856.5	855.1	856.5	852.4	852.4
10°	912.5	912.5	912.5	907.1	907.1	903.0	901.6	898.9	900.2	896.1	896.1
12.5°	961.8	961.8	960.4	957.7	956.3	953.6	950.9	950.9	948.1	942.6	939.9
15°	1005.6	1007.0	1005.6	1001.5	1000.1	996.0	996.0	993.3	989.2	986.4	983.7
17.5°	1046.6	1048.0	1043.9	1042.5	1038.4	1035.7	1032.9	1031.6	1028.8	1024.7	1023.4
20°	1086.3	1084.9	1080.8	1075.4	1072.6	1069.9	1067.1	1065.8	1064.4	1061.7	1061.7
22.5°	1124.6	1124.6	1120.5	1112.3	1106.8	1104.1	1100.0	1097.2	1094.5	1093.1	1095.9
25°	1182.1	1180.7	1172.5	1164.3	1154.7	1146.5	1141.0	1139.7	1136.9	1136.9	1138.3
27.5°	1256.0	1253.2	1240.9	1230.0	1219.0	1208.1	1201.2	1195.8	1194.4	1193.0	1193.0
30°	1349.0	1344.9	1333.9	1320.3	1307.9	1294.3	1280.6	1276.5	1269.6	1264.2	1273.7
32.5°	1526.8	1529.6	1507.7	1480.3	1453.0	1427.0	1403.7	1385.9	1375.0	1376.3	1376.3
35°	1722.5	1723.9	1714.3	1703.3	1695.1	1680.1	1654.1	1632.2	1615.8	1598.0	1606.2
37.5°	1807.3	1808.7	1800.5	1799.1	1804.6	1814.2	1840.1	1859.3	1888.0	1892.1	1883.9
40°	1956.4	1949.6	1938.7	1935.9	1931.8	1945.5	1956.4	1966.0	1970.1	1978.3	1970.1
42.5°	2112.4	2109.7	2101.5	2091.9	2091.9	2094.6	2112.4	2127.5	2137.0	2138.4	2137.0
45°	2287.5	2283.4	2276.6	2275.2	2279.3	2291.6	2303.9	2323.1	2353.2	2354.6	2353.2
47.5°	2480.4	2483.2	2472.2	2476.3	2483.2	2503.7	2537.9	2569.4	2602.2	2614.5	2599.5
50°	2744.5	2734.9	2734.9	2730.8	2748.6	2778.7	2819.7	2856.7	2903.2	2914.1	2890.9
52.5°	3102.9	3082.4	3086.5	3075.6	3085.2	3112.5	3179.6	3237.0	3295.9	3324.6	3279.4
55°	3533.9	3499.7	3503.8	3514.8	3523.0	3569.5	3654.3	3720.0	3830.8	3840.4	3788.4
57.5°	3886.9	3877.3	3882.8	3908.8	3960.8	4041.5	4148.2	4306.9	4443.7	4476.6	4420.5
60°	4015.5	4022.3	4060.6	4129.0	4227.6	4371.2	4579.2	4826.8	5044.3	5110.0	5025.2
62.5°	3815.7	3843.1	3895.1	4008.7	4164.6	4398.6	4717.3	5090.9	5416.5	5543.7	5391.8
65°	3425.8	3443.6	3528.4	3625.6	3826.7	4094.8	4486.1	4971.8	5372.7	5541.0	5371.3
67.5°	2914.1	2948.3	3022.2	3142.6	3316.4	3588.6	3999.1	4495.7	4897.9	5045.7	4896.6
70°	2339.5	2354.6	2401.1	2495.5	2676.1	2916.9	3268.5	3713.1	4104.4	4197.5	4078.4
72.5°	1622.6	1652.7	1692.4	1778.6	1892.1	2096.0	2386.0	2713.0	3027.7	3220.6	3045.5
75°	699.1	659.4	747.0	833.2	972.7	1161.6	1388.7	1656.8	1968.8	2097.4	1925.0
77.5°	209.3	208.0	221.6	246.3	295.5	391.3	548.6	729.2	970.0	1053.5	904.3
80°	171.0	176.5	182.0	187.4	192.9	199.7	212.1	247.6	303.7	358.5	291.4
82.5°	145.0	151.9	166.9	175.1	179.2	180.6	180.6	179.2	172.4	169.6	168.3
85°	109.5	120.4	140.9	153.2	153.2	153.2	153.2	149.1	139.6	123.1	136.8
87.5°	36.9	49.3	82.1	87.6	90.3	83.5	87.6	88.9	73.9	56.1	71.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	794.9	794.9	794.9	794.9	794.9	794.9	794.9	794.9
2.5°	799.0	799.0	799.0	800.4	799.0	799.0	799.0	799.0
5°	819.5	818.1	819.5	818.1	819.5	819.5	818.1	819.5
7.5°	851.0	851.0	852.4	852.4	851.0	851.0	851.0	851.0
10°	893.4	890.7	892.0	892.0	892.0	890.7	890.7	889.3
12.5°	937.2	934.4	934.4	934.4	934.4	933.1	934.4	934.4
15°	978.2	975.5	972.7	972.7	974.1	975.5	975.5	974.1
17.5°	1017.9	1015.2	1011.1	1011.1	1009.7	1012.4	1015.2	1013.8
20°	1057.6	1056.2	1049.4	1049.4	1049.4	1052.1	1053.5	1057.6
22.5°	1097.2	1095.9	1090.4	1089.0	1090.4	1095.9	1100.0	1100.0
25°	1139.7	1142.4	1141.0	1141.0	1143.8	1152.0	1156.1	1161.6
27.5°	1199.9	1205.3	1206.7	1212.2	1213.5	1223.1	1230.0	1238.2
30°	1277.8	1287.4	1292.9	1302.5	1309.3	1314.8	1324.4	1331.2
32.5°	1385.9	1409.2	1436.5	1468.0	1481.7	1506.3	1517.3	1520.0
35°	1634.9	1659.6	1682.8	1696.5	1691.0	1697.9	1697.9	1703.3
37.5°	1859.3	1834.7	1814.2	1810.0	1799.1	1795.0	1796.4	1800.5
40°	1963.3	1951.0	1942.8	1946.9	1941.4	1937.3	1940.0	1941.4
42.5°	2131.6	2112.4	2105.6	2104.2	2101.5	2104.2	2111.0	2108.3
45°	2328.6	2303.9	2294.4	2293.0	2288.9	2287.5	2290.3	2295.7
47.5°	2565.3	2535.2	2505.1	2495.5	2495.5	2487.3	2492.8	2484.5
50°	2855.3	2806.1	2774.6	2756.8	2745.9	2733.5	2744.5	2726.7
52.5°	3237.0	3167.2	3133.0	3109.8	3078.3	3079.7	3082.4	3075.6
55°	3718.6	3642.0	3575.0	3529.8	3510.6	3499.7	3497.0	3518.9
57.5°	4272.7	4137.3	4030.5	3951.2	3921.1	3880.0	3860.9	3860.9
60°	4799.4	4553.2	4341.1	4208.4	4109.9	4040.1	3993.6	3979.9
62.5°	5056.6	4683.1	4372.6	4153.7	3997.7	3897.8	3830.8	3813.0
65°	4945.8	4471.1	4105.8	3859.5	3678.9	3550.3	3472.3	3450.5
67.5°	4499.8	4003.2	3618.7	3371.1	3176.8	3037.3	2978.4	2953.8
70°	3736.4	3280.8	2947.0	2704.8	2502.3	2384.7	2303.9	2271.1
72.5°	2685.7	2339.5	2033.1	1825.1	1643.1	1581.6	1472.1	1461.2
75°	1587.0	1286.1	1032.9	874.2	711.4	622.5	571.9	517.2
77.5°	645.8	461.1	346.1	261.3	224.4	203.9	194.3	191.5
80°	220.3	197.0	186.1	182.0	176.5	173.8	166.9	161.4
82.5°	173.8	172.4	166.9	165.5	160.1	151.9	138.2	130.0
85°	145.0	142.3	135.4	134.1	130.0	119.0	104.0	94.4
87.5°	82.1	75.2	68.4	69.8	65.7	57.5	42.4	30.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)