

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: McGRAW-EDISON

Report Number: P299642

Luminaire Tested: **GLNA-AF-02-LED-E1-5MQ-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-5MQ-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9963.3 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 85
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

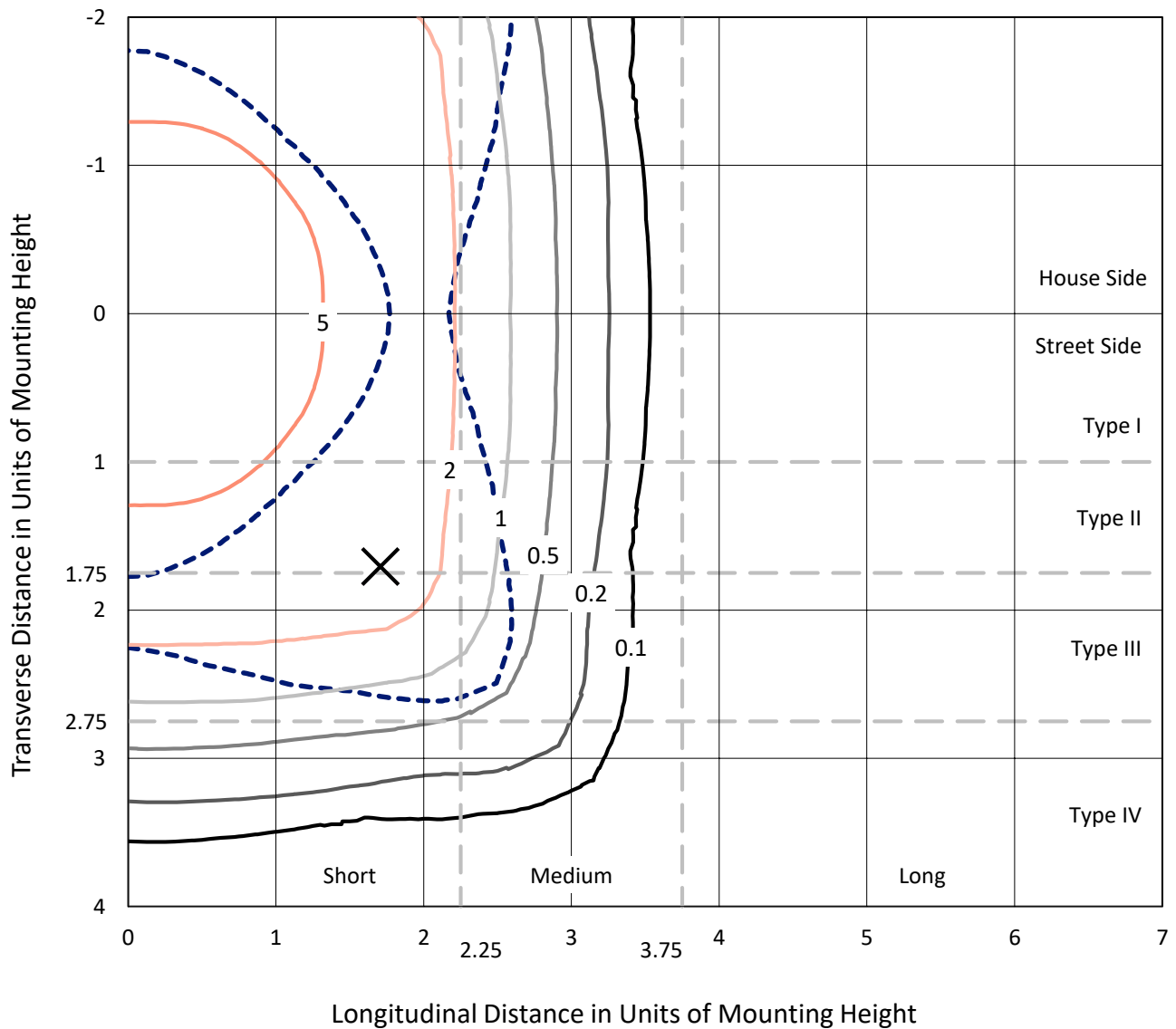


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

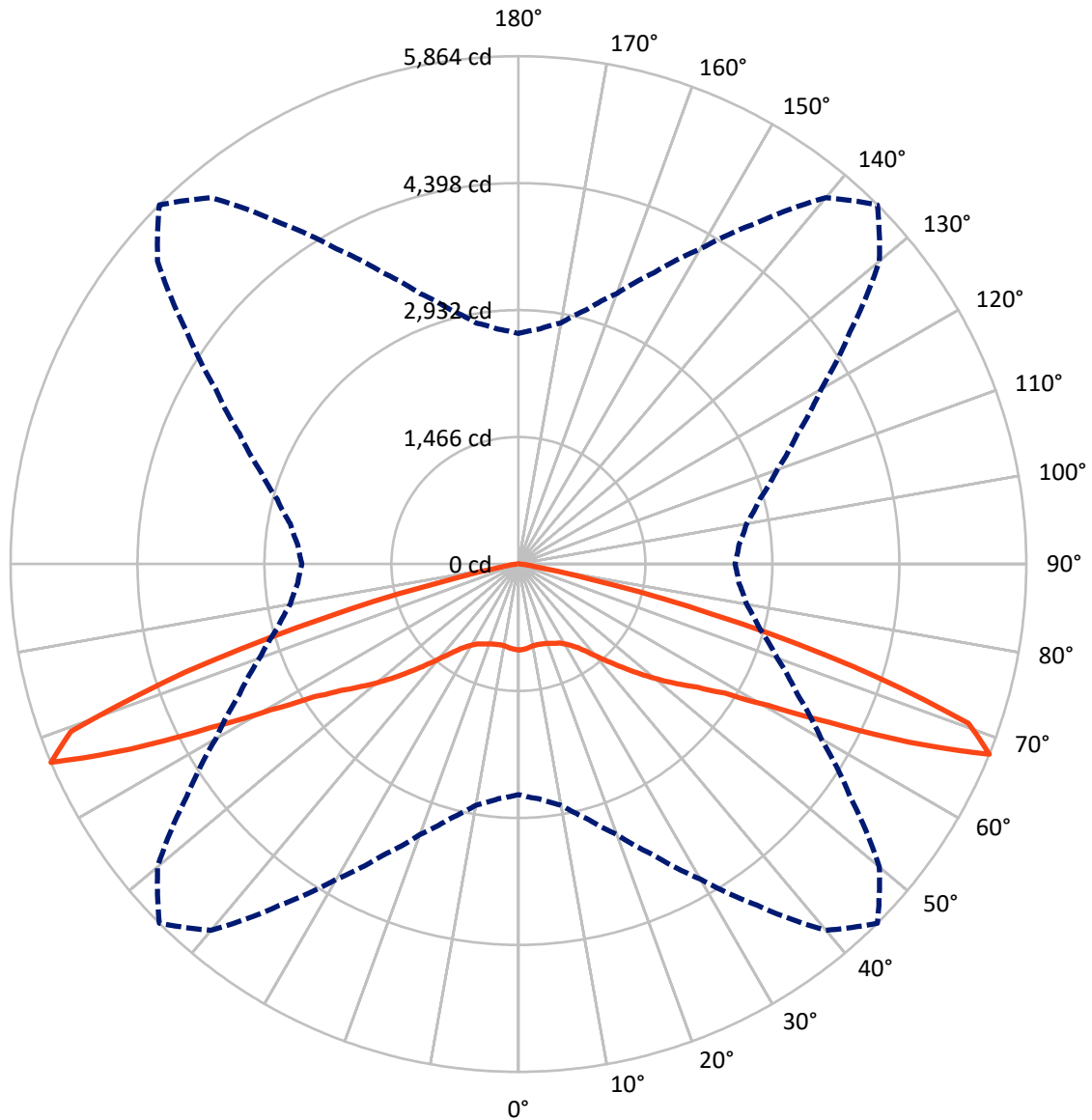


Based on 10 foot mounting height. Maximum calculated value = 9.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4981.7	0.0	4981.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4981.7	0.0	4981.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	9963.3	0.0	9963.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	0.9
10°-20°	269.7	2.7
20°-30°	458.4	4.6
30°-40°	749.4	7.5
40°-50°	1337.8	13.4
50°-60°	2255.5	22.6
60°-70°	3500.3	35.1
70°-80°	1229.8	12.3
80°-90°	69.5	0.7
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°	9963.3	100.0
0°-180°	9963.3	100.0

Coefficient of Utilization



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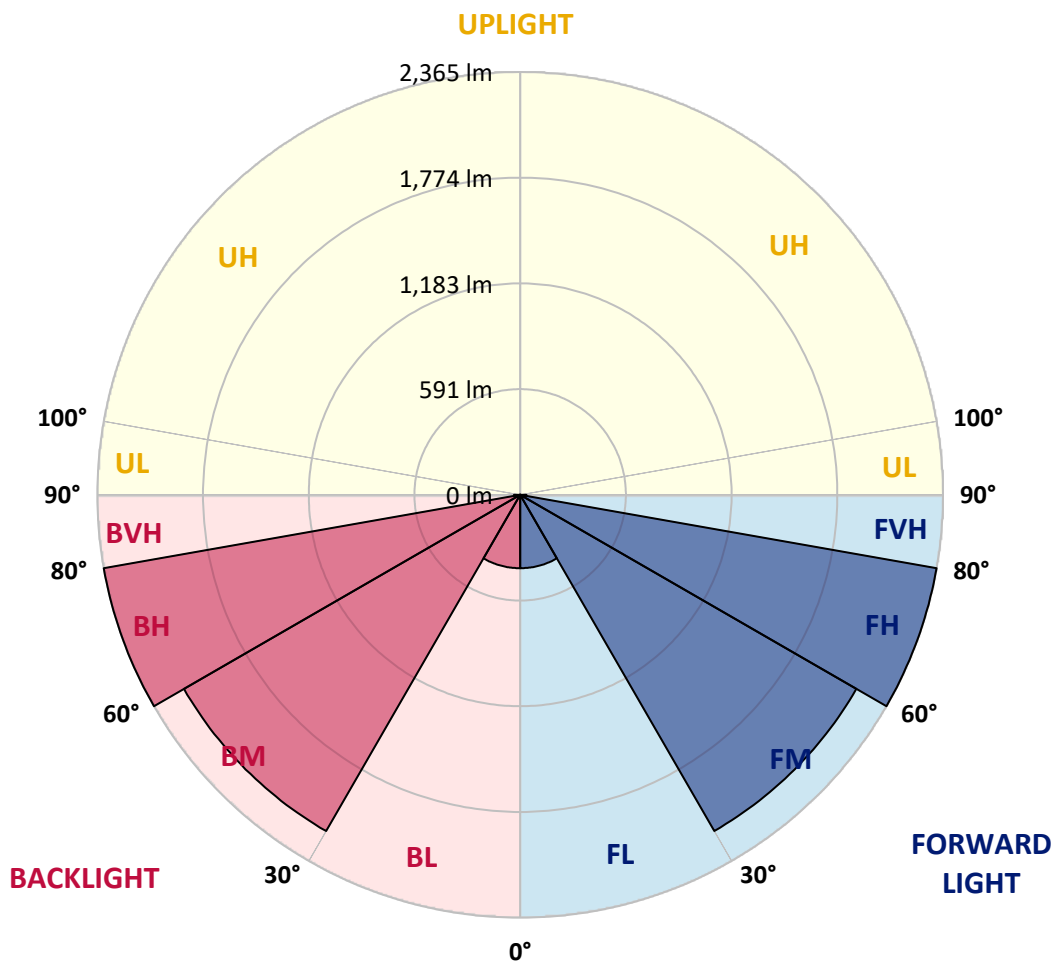
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	410.5	4.1			
FM	(30°-60°)	2171.4	21.8			
FH	(60°-80°)	2365.0	23.7			G2/5000
FVH	(80°-90°)	34.8	0.3			G1/100
BL	(0°-30°)	410.5	4.1	B1/500		
BM	(30°-60°)	2171.4	21.8	B2/2500		
BH	(60°-80°)	2365.0	23.7	B3/2500		G2/5000
BVH	(80°-90°)	34.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	992.9	992.9	992.9	992.9	992.9	992.9	992.9	992.9	992.9	992.9	992.9
2.5°	989.2	990.1	990.1	990.1	989.7	989.7	988.8	989.7	989.2	987.8	988.3
5°	981.0	981.9	981.9	981.4	982.8	982.3	981.0	981.9	981.4	980.5	981.0
7.5°	969.1	970.4	970.4	970.0	971.4	970.9	970.0	970.4	970.4	969.1	969.1
10°	955.8	956.7	956.7	956.2	958.5	958.5	958.1	959.4	959.9	958.5	957.6
12.5°	943.4	944.8	944.8	946.6	948.9	949.8	952.1	953.9	955.8	955.3	953.5
15°	936.1	937.0	938.8	941.1	944.8	948.0	951.6	955.8	959.4	960.4	957.6
17.5°	931.5	932.9	935.6	938.8	943.9	949.4	954.9	960.4	965.4	967.2	964.0
20°	930.1	931.0	933.8	939.3	946.2	954.4	962.2	968.6	975.5	977.8	975.5
22.5°	932.9	934.7	937.9	944.3	953.5	964.0	973.2	981.9	990.6	994.7	991.5
25°	945.2	947.1	951.2	959.4	969.5	980.5	991.1	1001.1	1008.9	1013.0	1010.8
27.5°	968.1	970.4	975.5	983.7	994.7	1006.6	1018.1	1026.3	1032.7	1034.1	1031.4
30°	1002.5	1007.5	1013.5	1022.7	1035.5	1045.6	1057.0	1064.4	1072.2	1072.2	1069.9
32.5°	1056.1	1061.2	1067.6	1076.3	1086.4	1097.4	1107.4	1113.8	1122.1	1122.6	1117.1
35°	1136.3	1138.6	1144.1	1149.6	1158.7	1168.4	1177.1	1181.2	1188.1	1188.5	1183.5
37.5°	1242.1	1242.6	1246.3	1248.1	1256.3	1266.9	1275.1	1277.9	1284.3	1283.4	1278.3
40°	1365.4	1367.7	1369.1	1371.8	1380.5	1390.6	1399.3	1400.7	1407.5	1406.2	1399.8
42.5°	1507.9	1508.8	1516.6	1520.7	1529.0	1534.0	1545.0	1546.4	1554.6	1551.0	1543.6
45°	1667.8	1676.0	1683.4	1691.6	1700.3	1706.3	1715.0	1713.2	1718.7	1713.2	1709.0
47.5°	1835.9	1841.9	1858.4	1871.2	1885.4	1890.5	1902.8	1897.3	1902.8	1895.1	1893.7
50°	2021.1	2031.6	2045.8	2060.5	2075.6	2083.8	2099.9	2093.0	2100.3	2093.0	2088.9
52.5°	2203.4	2206.2	2237.3	2258.9	2279.9	2289.5	2299.2	2296.0	2296.4	2296.0	2291.8
55°	2376.6	2383.0	2414.2	2443.5	2480.2	2507.2	2523.7	2521.8	2517.7	2513.6	2506.7
57.5°	2571.8	2578.2	2613.9	2650.1	2691.8	2730.3	2763.8	2798.1	2811.4	2815.1	2800.0
60°	2835.7	2835.2	2882.9	2926.9	2986.4	3043.7	3117.0	3191.7	3277.4	3317.3	3264.6
62.5°	3104.2	3115.2	3183.9	3261.8	3384.6	3504.2	3639.4	3772.2	3907.9	4018.3	3901.0
65°	3072.1	3114.3	3216.5	3392.9	3619.7	3889.1	4180.5	4488.8	4767.4	4958.9	4744.0
67.5°	2662.5	2722.5	2826.5	3041.0	3324.6	3713.1	4202.5	4812.3	5521.1	5863.8	5439.1
70°	1929.9	1997.7	2106.7	2316.1	2597.0	2966.3	3497.8	4230.0	5168.3	5513.8	5046.0
72.5°	960.4	997.0	1064.4	1197.7	1410.3	1709.9	2192.0	2895.7	3726.0	4043.0	3615.5
75°	326.2	343.2	354.6	398.2	465.5	583.3	822.9	1266.0	1931.2	2315.2	1903.8
77.5°	188.3	188.8	196.6	204.4	215.8	228.6	260.7	342.3	592.0	840.8	612.6
80°	121.9	121.4	127.8	133.8	141.6	148.0	149.8	158.5	182.8	216.7	193.8
82.5°	63.2	71.0	85.2	93.0	107.7	110.4	106.8	103.5	109.5	113.6	116.4
85°	34.8	30.2	45.4	58.6	65.1	66.0	66.0	62.3	64.6	63.2	68.7
87.5°	16.0	14.7	17.9	28.9	30.7	26.1	27.5	24.3	17.4	17.0	19.2
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°	992.9	992.9	992.9	992.9	992.9	992.9	992.9	992.9
2.5°	988.3	988.8	988.8	990.1	990.6	991.5	992.4	992.9
5°	980.5	981.9	981.0	982.3	982.3	983.3	983.3	983.7
7.5°	969.1	970.4	970.4	970.4	970.0	971.4	971.4	971.4
10°	957.1	958.1	957.6	956.7	955.8	957.1	956.7	956.2
12.5°	953.5	951.2	949.4	948.4	946.6	947.1	945.7	945.7
15°	955.8	951.6	948.4	947.1	945.2	944.3	943.4	943.9
17.5°	961.7	956.7	952.6	950.3	948.0	946.6	944.8	945.2
20°	972.3	966.3	960.4	955.8	951.6	949.4	948.0	947.5
22.5°	987.8	979.1	970.4	963.6	958.1	954.9	953.5	952.6
25°	1005.7	996.1	986.0	978.2	972.7	968.6	965.9	965.9
27.5°	1028.2	1020.4	1011.2	1002.1	997.0	992.9	991.1	990.1
30°	1065.7	1058.4	1051.1	1042.4	1036.0	1031.8	1028.6	1025.9
32.5°	1113.8	1107.9	1101.9	1095.5	1089.6	1084.1	1079.0	1076.7
35°	1181.7	1177.1	1173.0	1165.6	1163.3	1160.1	1157.4	1155.1
37.5°	1275.1	1273.3	1273.3	1265.5	1263.7	1262.3	1259.5	1260.0
40°	1397.9	1399.8	1397.5	1394.7	1393.3	1389.7	1389.7	1392.9
42.5°	1543.2	1544.5	1549.6	1545.0	1550.0	1545.5	1542.7	1545.0
45°	1711.8	1716.8	1726.9	1722.3	1725.5	1717.7	1708.1	1708.6
47.5°	1901.0	1905.6	1909.7	1906.5	1907.0	1894.1	1881.3	1878.1
50°	2097.6	2099.4	2101.7	2097.1	2098.0	2083.8	2069.2	2069.6
52.5°	2291.8	2300.5	2309.7	2297.3	2294.6	2278.6	2257.9	2249.7
55°	2514.1	2526.4	2515.9	2494.4	2472.8	2451.3	2424.3	2419.7
57.5°	2788.1	2767.0	2734.0	2693.2	2663.4	2633.2	2605.7	2594.2
60°	3169.3	3090.0	3030.4	2970.0	2931.9	2894.8	2858.6	2853.1
62.5°	3708.1	3571.1	3452.4	3327.3	3225.2	3145.4	3081.8	3063.9
65°	4383.5	4059.5	3778.6	3516.6	3288.9	3117.0	3008.9	2961.2
67.5°	4673.9	4034.3	3552.8	3180.7	2882.9	2674.9	2558.0	2499.9
70°	4107.2	3345.7	2822.0	2449.5	2178.2	1956.4	1850.6	1788.3
72.5°	2825.6	2128.3	1682.9	1373.6	1156.9	971.4	898.0	892.5
75°	1268.7	840.3	579.1	446.3	375.7	326.7	311.6	300.1
77.5°	355.1	262.5	234.1	219.0	204.4	187.4	181.0	182.4
80°	172.7	163.1	156.7	147.1	133.8	119.6	113.2	115.9
82.5°	114.5	113.2	117.3	110.4	91.2	77.4	65.1	59.6
85°	69.6	70.6	71.9	72.4	61.4	43.1	29.3	33.0
87.5°	27.5	31.6	34.4	35.7	33.4	20.6	16.5	17.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)