

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: P299888

Luminaire Tested: **GLNA-AF-03-LED-E1-5WQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299888  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-5WQ-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14905.5 lumens  
Efficiency: N/A  
Efficacy: 120.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 124  
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

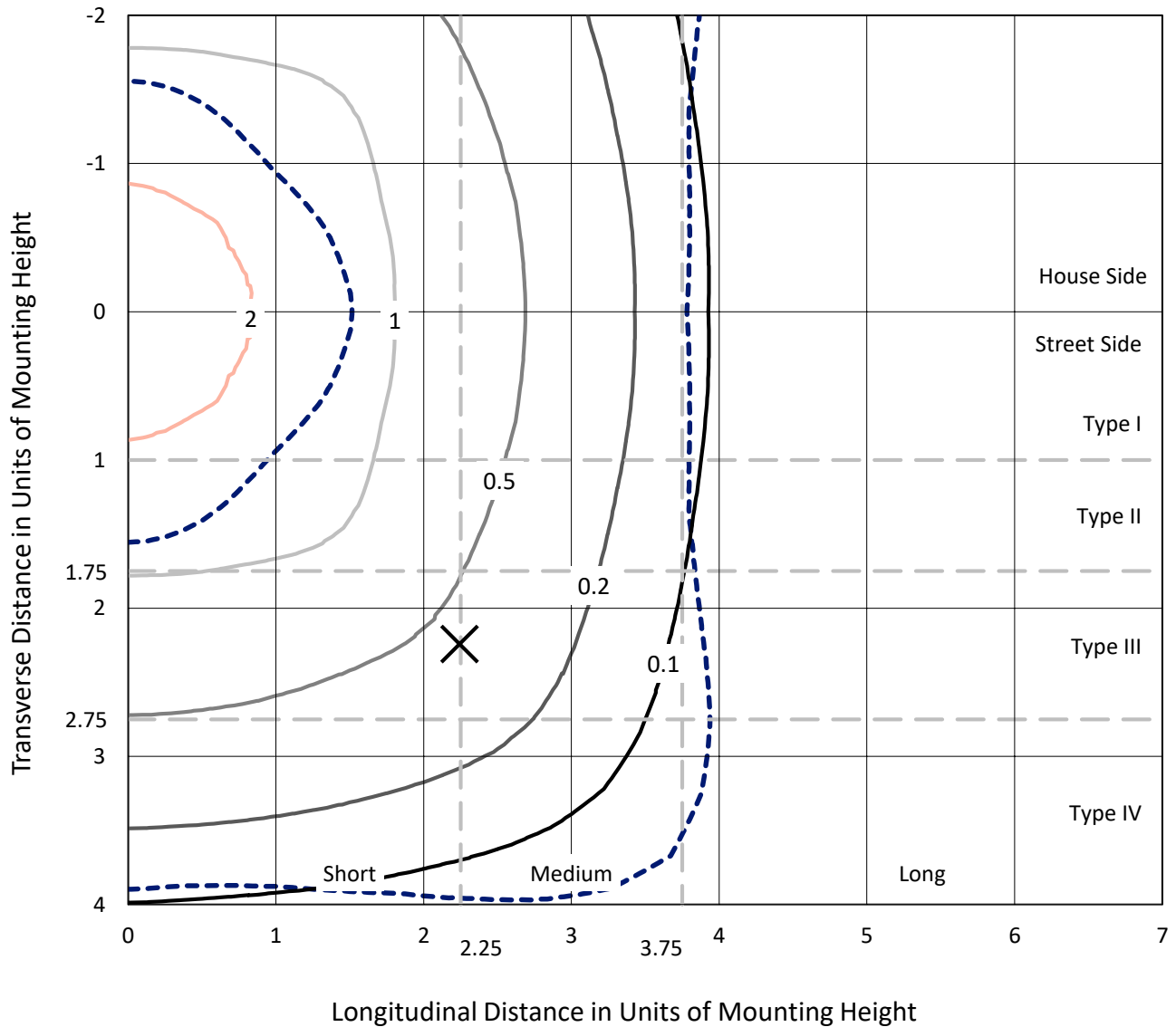


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

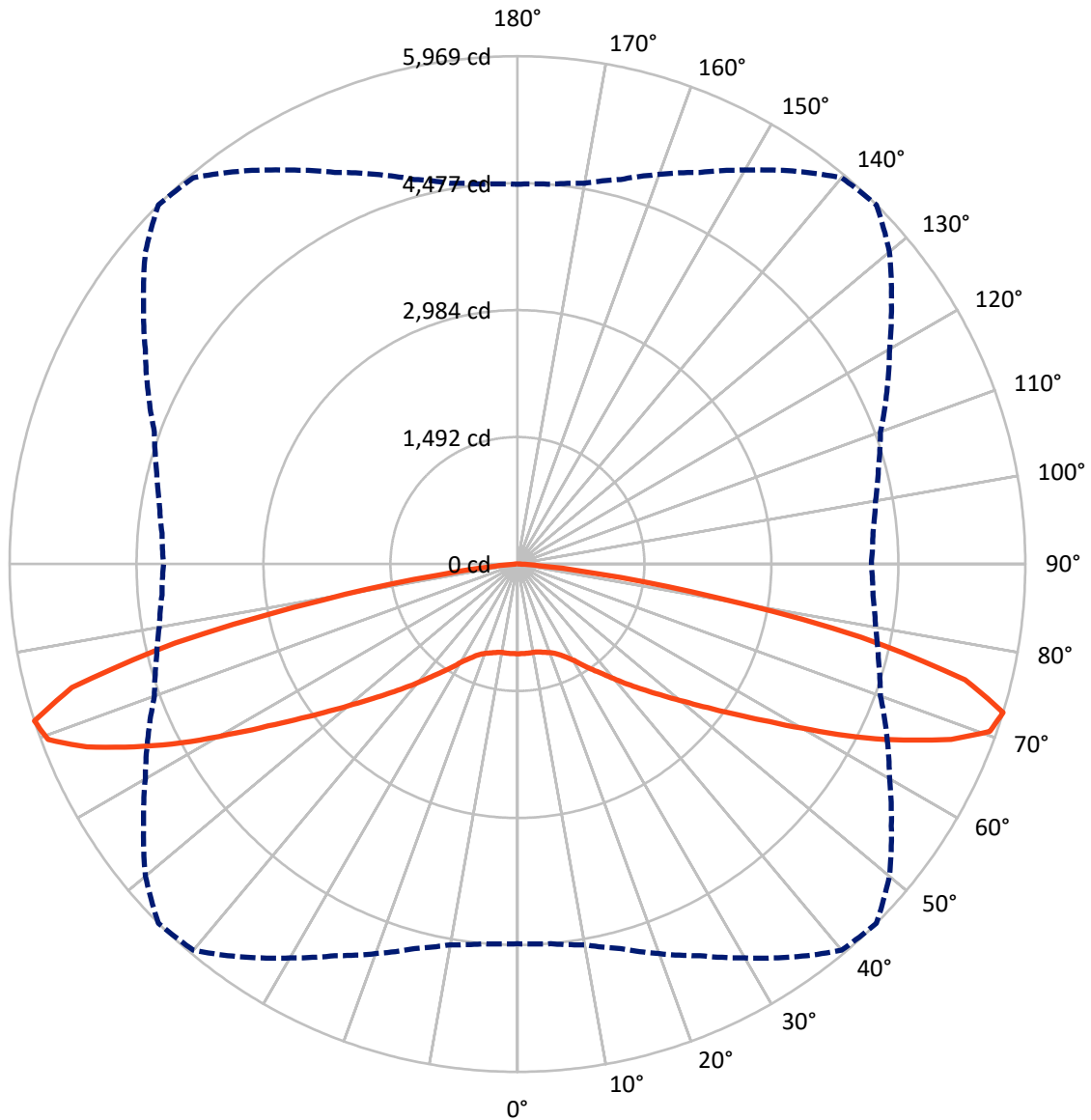


Based on 20 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7452.7	0.0	7452.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7452.7	0.0	7452.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	14905.5	0.0	14905.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.8	0.7
10°-20°	306.1	2.1
20°-30°	559.4	3.8
30°-40°	964.5	6.5
40°-50°	1648.8	11.1
50°-60°	2672.5	17.9
60°-70°	4433.6	29.7
70°-80°	3904.9	26.2
80°-90°	314.8	2.1
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°	14905.5	100.0
0°-180°	14905.5	100.0



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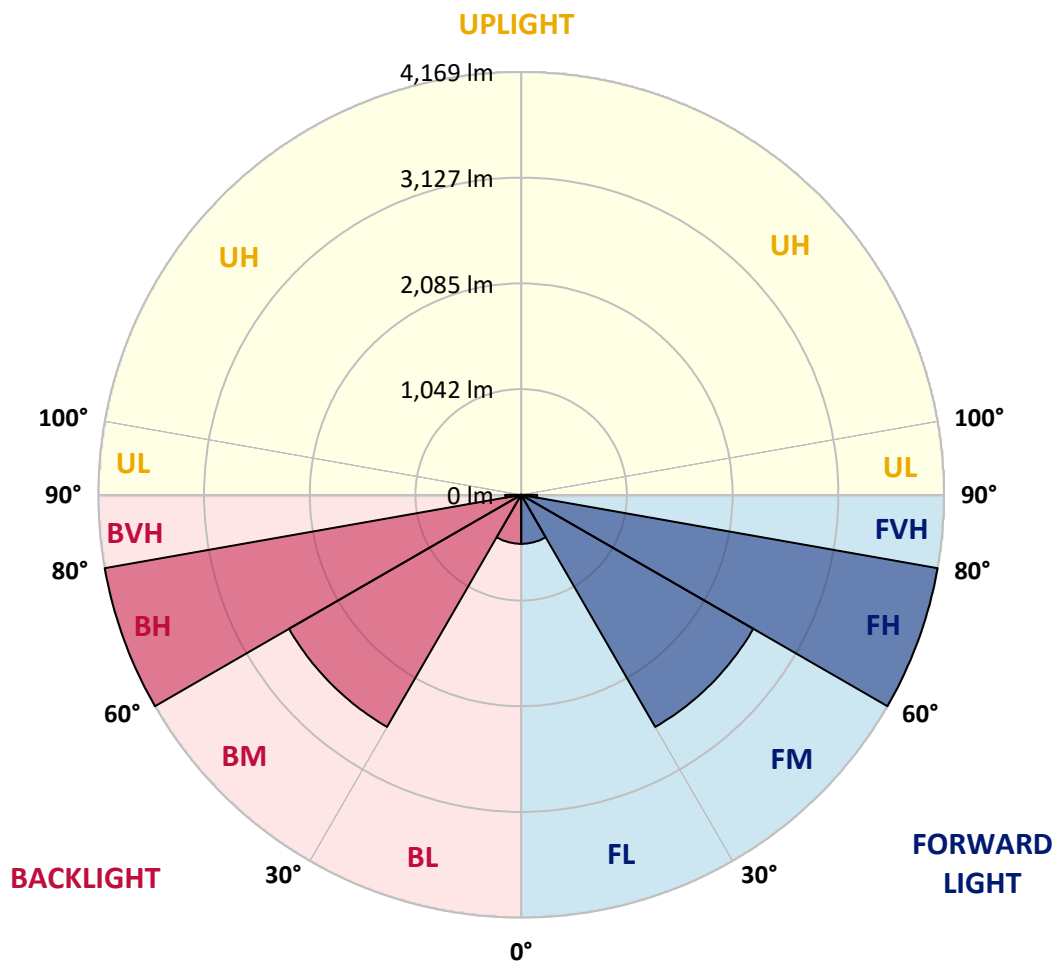
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	483.2	3.2			
FM	(30°-60°)	2642.9	17.7			
FH	(60°-80°)	4169.3	28.0			G2/5000
FVH	(80°-90°)	157.4	1.1			G2/225
BL	(0°-30°)	483.2	3.2	B1/500		
BM	(30°-60°)	2642.9	17.7	B3/5000		
BH	(60°-80°)	4169.3	28.0	B4/5000		G2/5000
BVH	(80°-90°)	157.4	1.1			G2/225
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°	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5
2.5°	1055.5	1056.2	1056.9	1056.2	1056.2	1055.5	1054.9	1055.5	1054.9	1053.5	1054.2
5°	1059.0	1060.3	1060.3	1059.0	1059.6	1059.0	1057.6	1058.3	1056.9	1054.9	1054.9
7.5°	1063.1	1063.7	1063.7	1062.4	1063.1	1061.7	1060.3	1059.6	1058.3	1055.5	1053.5
10°	1069.2	1069.9	1069.2	1067.8	1067.8	1065.8	1062.4	1061.0	1058.3	1054.2	1052.1
12.5°	1076.0	1076.7	1076.0	1074.7	1074.0	1070.6	1067.8	1065.8	1063.7	1060.3	1056.9
15°	1085.6	1087.0	1085.6	1082.9	1080.8	1078.1	1076.7	1077.4	1078.1	1075.4	1071.9
17.5°	1103.4	1104.1	1102.0	1095.9	1093.1	1090.4	1090.4	1091.8	1093.8	1092.5	1089.0
20°	1136.2	1134.2	1129.4	1121.9	1118.4	1113.6	1113.0	1113.6	1113.6	1113.0	1110.2
22.5°	1177.2	1175.9	1169.7	1160.1	1155.4	1152.6	1148.5	1145.1	1144.4	1142.4	1139.6
25°	1226.4	1225.8	1218.2	1210.0	1206.6	1203.2	1199.8	1195.0	1190.9	1186.1	1183.4
27.5°	1289.3	1286.6	1275.7	1271.6	1266.8	1264.7	1259.9	1254.5	1251.1	1244.9	1241.5
30°	1358.4	1358.4	1349.5	1348.1	1348.1	1343.4	1337.9	1328.3	1322.2	1316.0	1314.0
32.5°	1427.4	1428.1	1419.2	1422.0	1424.0	1427.4	1428.8	1425.4	1421.3	1420.6	1416.5
35°	1527.3	1524.5	1515.6	1517.7	1517.0	1516.3	1516.3	1523.8	1525.2	1526.6	1518.4
37.5°	1651.0	1651.0	1642.1	1642.1	1638.0	1633.9	1628.4	1633.2	1640.7	1642.8	1637.3
40°	1792.5	1797.3	1786.3	1785.7	1787.0	1774.0	1767.9	1775.4	1780.2	1788.4	1782.2
42.5°	1959.3	1955.9	1945.0	1943.6	1936.1	1932.0	1926.5	1932.6	1940.2	1945.6	1947.7
45°	2119.3	2116.5	2104.2	2104.2	2096.7	2093.3	2096.0	2106.3	2109.7	2117.2	2124.8
47.5°	2277.2	2273.8	2265.6	2269.0	2269.7	2275.8	2284.7	2294.3	2303.9	2314.1	2317.5
50°	2438.5	2439.2	2430.3	2438.5	2448.8	2465.9	2489.8	2505.5	2525.4	2538.4	2542.5
52.5°	2585.5	2588.3	2597.8	2617.0	2637.5	2671.0	2712.0	2750.3	2783.1	2805.0	2803.6
55°	2761.9	2766.0	2789.2	2822.1	2855.6	2906.2	2967.0	3034.7	3089.4	3120.8	3101.0
57.5°	2987.5	2996.4	3022.4	3066.8	3116.7	3182.3	3265.7	3367.6	3452.4	3494.8	3462.6
60°	3297.2	3302.7	3334.1	3383.3	3443.5	3524.8	3636.3	3773.0	3892.6	3948.7	3911.8
62.5°	3705.3	3715.6	3740.9	3790.8	3852.3	3944.6	4080.6	4251.6	4400.6	4478.5	4395.1
65°	4192.8	4225.6	4246.8	4297.4	4354.8	4452.5	4594.7	4778.0	4937.9	4989.2	4892.8
67.5°	4675.4	4704.1	4741.0	4799.1	4857.3	4967.3	5099.3	5277.0	5452.7	5499.2	5349.5
70°	4886.7	4903.1	4960.5	5039.8	5151.2	5281.1	5433.6	5633.2	5850.6	5888.9	5698.8
72.5°	4463.5	4479.9	4544.1	4678.8	4873.0	5079.4	5345.4	5638.7	5925.8	5968.9	5707.0
75°	3375.8	3349.1	3444.2	3622.6	3884.4	4172.3	4544.1	4964.6	5379.6	5433.6	5121.1
77.5°	1744.6	1741.2	1813.0	2034.5	2346.9	2674.4	3083.9	3559.0	3965.1	4129.2	3874.9
80°	491.5	497.0	531.2	641.3	823.8	1060.3	1380.3	1825.3	2157.6	2327.1	2184.9
82.5°	192.8	207.8	220.8	241.3	265.3	300.1	400.6	596.1	799.9	955.7	782.8
85°	69.0	73.8	104.6	123.7	125.8	132.6	151.1	176.4	212.6	253.6	208.5
87.5°	26.0	28.7	33.5	55.4	54.7	49.9	60.8	63.6	47.9	43.8	54.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5	1055.5
2.5°	1052.8	1053.5	1053.5	1054.2	1054.9	1054.9	1056.2	1056.2
5°	1053.5	1053.5	1052.1	1052.8	1052.1	1052.1	1052.8	1052.8
7.5°	1052.1	1051.4	1050.1	1049.4	1048.0	1048.0	1048.0	1048.0
10°	1050.1	1049.4	1048.0	1047.3	1046.7	1046.7	1046.7	1046.7
12.5°	1055.5	1053.5	1052.1	1051.4	1051.4	1051.4	1051.4	1051.4
15°	1069.9	1065.1	1061.7	1061.7	1062.4	1063.7	1063.7	1065.1
17.5°	1087.7	1082.2	1078.8	1076.0	1077.4	1079.5	1080.8	1082.2
20°	1108.9	1106.1	1101.3	1098.6	1098.6	1101.3	1102.7	1103.4
22.5°	1138.3	1136.2	1134.2	1130.7	1130.7	1132.1	1134.8	1134.8
25°	1182.0	1180.6	1179.3	1176.5	1175.9	1175.9	1177.2	1178.6
27.5°	1236.7	1237.4	1236.0	1235.3	1233.3	1232.6	1234.7	1234.0
30°	1309.9	1313.3	1316.7	1314.0	1310.5	1308.5	1306.4	1303.7
32.5°	1409.0	1404.9	1402.1	1397.4	1391.2	1385.7	1381.6	1376.8
35°	1502.6	1495.8	1493.1	1497.2	1496.5	1493.1	1488.3	1484.2
37.5°	1617.5	1616.1	1617.5	1625.0	1623.6	1627.1	1617.5	1616.8
40°	1762.4	1763.8	1773.4	1782.2	1787.0	1791.8	1786.3	1780.9
42.5°	1930.6	1929.9	1933.3	1945.6	1953.8	1959.3	1947.7	1946.3
45°	2108.3	2103.6	2106.3	2116.5	2124.8	2130.9	2117.9	2117.9
47.5°	2303.9	2295.7	2286.8	2298.4	2303.2	2307.3	2297.0	2293.6
50°	2521.9	2504.9	2485.7	2490.5	2490.5	2489.1	2476.1	2475.5
52.5°	2772.2	2740.7	2705.8	2692.9	2685.3	2677.1	2654.6	2643.6
55°	3060.0	3012.8	2958.1	2924.6	2906.8	2884.3	2846.7	2836.4
57.5°	3396.3	3322.5	3228.1	3187.1	3147.5	3110.6	3068.9	3057.2
60°	3794.9	3686.2	3561.1	3485.2	3442.1	3406.6	3363.5	3361.5
62.5°	4239.2	4067.7	3926.1	3857.8	3826.3	3794.9	3753.9	3759.3
65°	4691.1	4512.0	4379.4	4324.0	4294.6	4268.6	4227.6	4233.8
67.5°	5136.9	4972.1	4826.5	4769.8	4736.9	4704.1	4667.2	4673.4
70°	5456.8	5252.4	5088.3	4962.5	4883.9	4795.0	4737.6	4723.3
72.5°	5365.2	5050.0	4789.6	4540.0	4393.7	4274.8	4194.1	4159.3
75°	4643.3	4212.6	3877.6	3571.3	3399.1	3258.9	3157.0	3093.5
77.5°	3448.3	2964.3	2568.4	2215.7	1936.7	1749.4	1617.5	1532.0
80°	1887.5	1435.6	1049.4	737.6	542.1	450.5	397.9	372.6
82.5°	587.9	379.4	279.6	241.3	224.2	214.7	198.9	173.6
85°	187.3	164.1	152.5	145.6	138.8	121.0	83.4	75.9
87.5°	72.5	74.5	73.8	69.7	71.1	51.3	41.0	36.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)