

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: STREETWORKS

Report Number: P157354

Luminaire Tested: **VST-F05-LED-E-U-5MQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P157354  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-F05-LED-E-U-5MQ-7030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (35) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12059.6 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

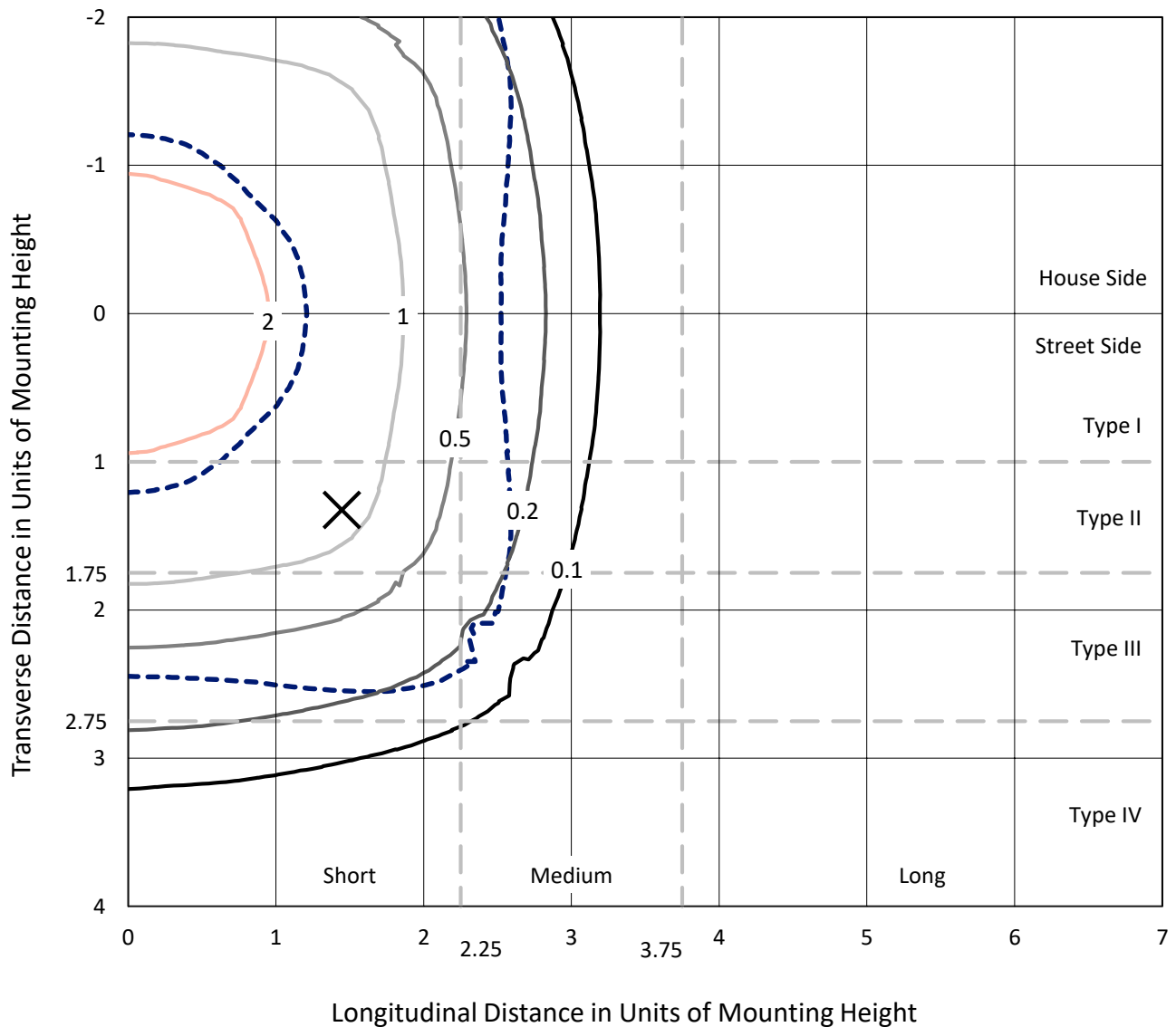
Input Watts (W): 133.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

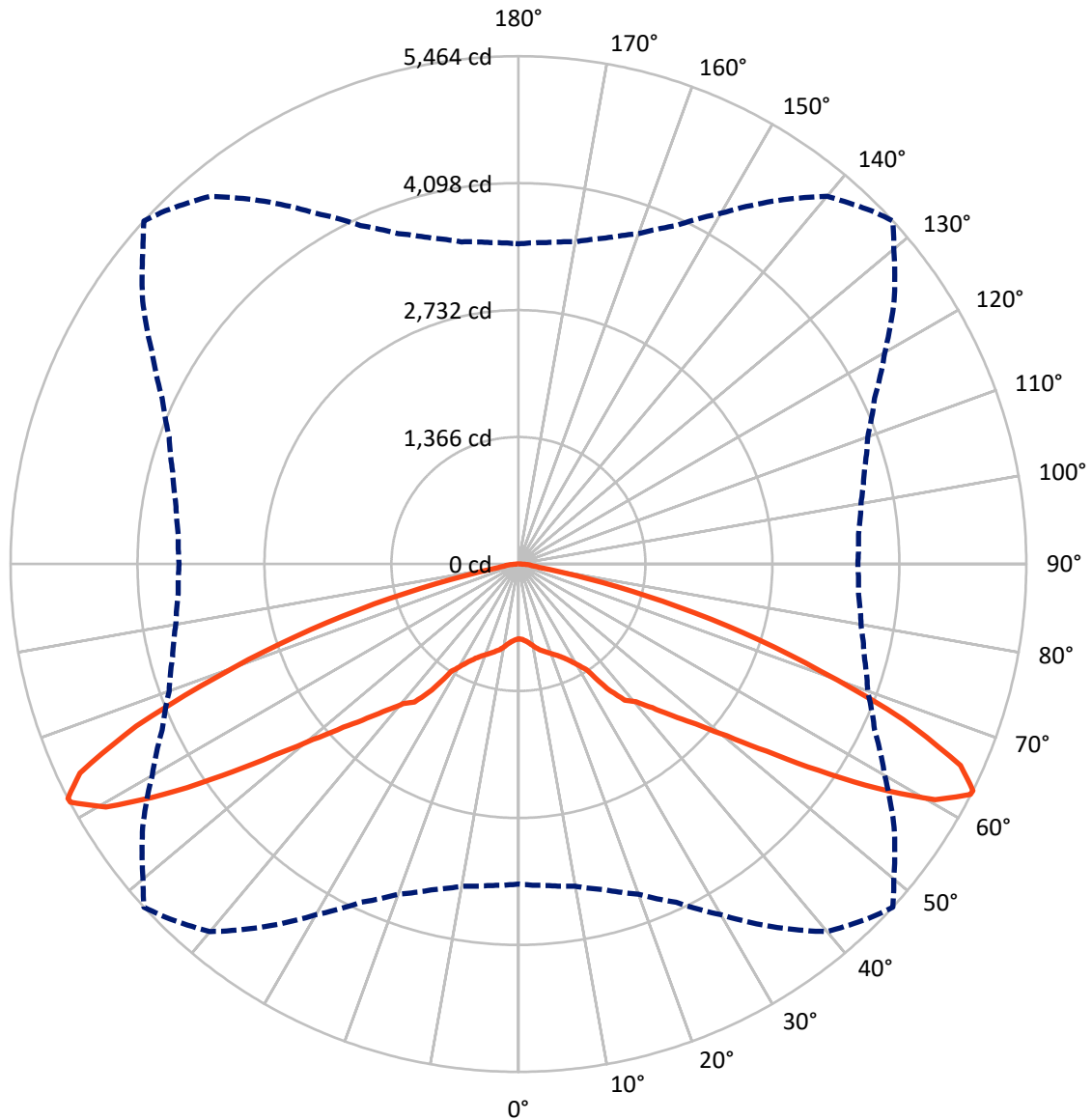
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.2 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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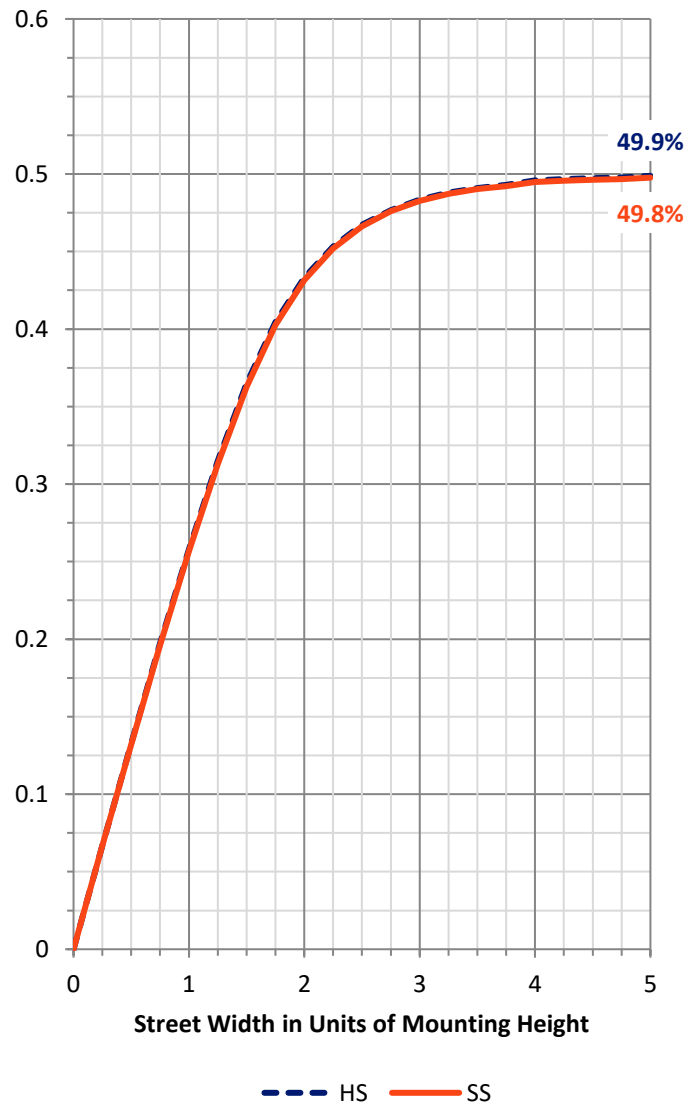
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6029.8	0.0	6029.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6029.8	0.0	6029.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	12059.6	0.0	12059.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	0.7
10°-20°	274.8	2.3
20°-30°	525.7	4.4
30°-40°	1005.5	8.3
40°-50°	1739.9	14.4
50°-60°	3124.8	25.9
60°-70°	3799.8	31.5
70°-80°	1372.3	11.4
80°-90°	135.9	1.1
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°	12059.6	100.0
0°-180°	12059.6	100.0



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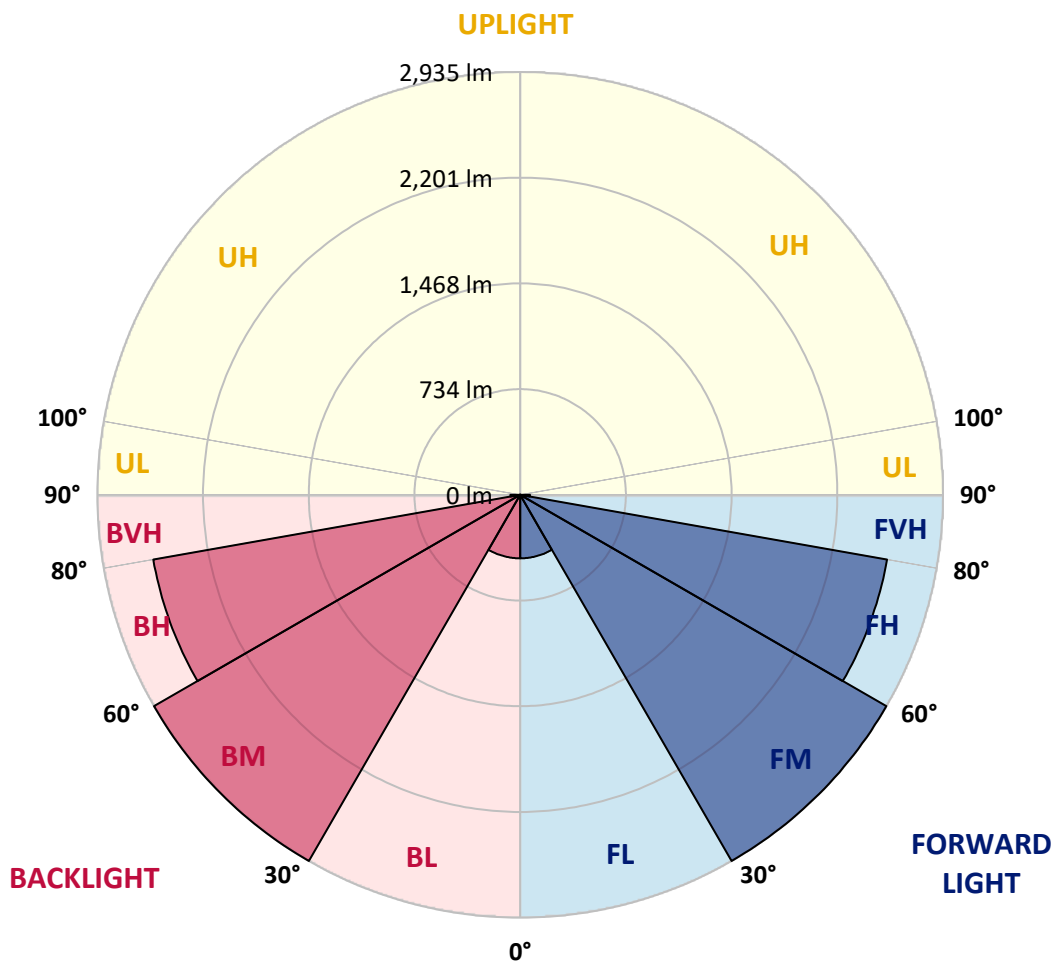
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	440.7	3.7			
FM	(30°-60°)	2935.1	24.3			
FH	(60°-80°)	2586.0	21.4			G2/5000
FVH	(80°-90°)	68.0	0.6			G1/100
BL	(0°-30°)	440.7	3.7	B1/500		
BM	(30°-60°)	2935.1	24.3	B3/5000		
BH	(60°-80°)	2586.0	21.4	B4/5000		G2/5000
BVH	(80°-90°)	68.0	0.6			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°	47.5°
0°	805.3	805.3	805.3	805.3	805.3	805.3	805.3	805.3	805.3	805.3	805.3
2.5°	810.5	809.0	809.8	810.5	809.8	809.0	809.0	809.0	810.5	809.0	812.8
5°	826.4	824.9	825.6	825.6	825.6	824.1	824.1	824.1	823.4	824.1	832.4
7.5°	856.5	854.3	853.5	855.0	853.5	852.8	852.0	852.0	850.5	850.5	861.1
10°	892.7	889.7	891.2	892.0	889.7	888.2	888.2	888.2	885.9	885.2	898.8
12.5°	932.7	931.2	931.2	929.7	928.9	927.4	926.7	927.4	924.4	924.4	938.0
15°	971.1	968.1	968.9	966.6	965.1	963.6	962.8	962.1	960.6	960.6	968.9
17.5°	1006.6	1004.3	1003.6	1001.3	999.0	996.8	995.3	994.5	992.3	992.3	999.8
20°	1043.5	1041.3	1039.8	1036.0	1032.2	1030.0	1026.9	1025.4	1022.4	1023.2	1031.5
22.5°	1085.8	1082.0	1079.0	1075.9	1069.2	1064.6	1060.9	1057.9	1056.3	1056.3	1067.7
25°	1142.3	1140.0	1135.5	1125.7	1117.4	1110.6	1104.6	1101.6	1098.6	1097.1	1114.4
27.5°	1211.7	1209.4	1203.4	1193.6	1182.3	1171.0	1164.2	1158.9	1155.1	1152.9	1177.7
30°	1303.7	1299.9	1294.6	1278.8	1269.0	1251.6	1244.1	1236.5	1228.3	1230.5	1259.9
32.5°	1483.9	1478.6	1462.0	1444.7	1414.5	1391.1	1367.0	1348.9	1331.6	1329.3	1361.0
35°	1647.5	1645.2	1642.2	1630.1	1618.8	1604.5	1593.2	1574.3	1558.5	1554.7	1643.7
37.5°	1735.7	1741.0	1736.4	1734.9	1734.9	1741.7	1762.8	1783.9	1799.0	1808.1	1857.8
40°	1870.7	1870.7	1865.4	1862.4	1856.3	1865.4	1874.4	1890.3	1897.0	1897.8	1948.3
42.5°	2023.7	2024.5	2019.2	2010.1	2007.1	2015.4	2027.5	2042.6	2051.6	2053.9	2112.7
45°	2194.1	2191.9	2187.3	2184.3	2186.6	2194.1	2208.4	2237.9	2251.4	2262.0	2326.1
47.5°	2378.8	2393.9	2381.1	2383.4	2383.4	2406.7	2439.2	2463.3	2485.2	2505.5	2573.4
50°	2620.9	2623.1	2625.4	2632.2	2636.7	2667.6	2708.3	2737.0	2768.7	2795.1	2905.9
52.5°	2944.3	2939.8	2951.1	2958.7	2984.3	3000.9	3068.8	3104.9	3148.7	3182.6	3344.7
55°	3331.1	3328.9	3345.5	3351.5	3385.4	3426.1	3501.5	3580.7	3655.4	3696.8	3918.5
57.5°	3608.6	3614.6	3643.3	3683.3	3749.6	3836.3	3948.7	4123.6	4265.3	4310.6	4554.9
60°	3669.7	3689.3	3732.3	3812.2	3926.0	4087.4	4308.3	4576.0	4835.4	4922.1	5151.3
62.5°	3498.5	3521.1	3584.5	3680.2	3828.8	4067.8	4386.7	4764.5	5149.8	5342.8	5458.2
63°	3444.2	3472.1	3519.6	3630.5	3781.3	4017.3	4356.6	4763.7	5163.3	5373.7	5464.2
65°	3189.4	3194.7	3265.5	3376.4	3546.0	3791.1	4133.4	4603.9	5047.2	5290.0	5227.4
67.5°	2744.5	2766.4	2826.0	2937.6	3102.7	3357.5	3729.3	4164.3	4554.1	4747.9	4468.2
70°	2217.5	2216.0	2289.9	2379.6	2525.1	2749.1	3074.8	3467.6	3776.8	3917.8	3449.5
72.5°	1584.1	1544.9	1599.2	1698.7	1817.9	1996.6	2254.4	2559.8	2836.5	2958.7	2522.1
75°	721.6	711.0	759.3	858.0	978.7	1137.8	1349.6	1613.5	1879.0	2022.2	1606.8
77.5°	242.8	245.8	264.7	300.1	364.9	444.9	576.8	745.7	960.6	1102.3	754.0
80°	162.9	167.4	173.4	178.7	186.2	198.3	227.0	270.7	337.0	407.9	238.3
82.5°	133.5	138.7	152.3	158.3	162.9	166.6	168.9	171.9	171.9	173.4	150.8
85°	95.8	104.8	122.9	134.2	138.7	141.8	145.5	150.0	143.3	137.2	116.9
87.5°	33.2	45.2	66.4	73.1	78.4	79.2	84.4	93.5	89.0	72.4	35.4
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):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	805.3	805.3	805.3	805.3	805.3	805.3	805.3	805.3	805.3
2.5°	809.0	808.3	809.0	809.8	809.8	809.8	810.5	811.3	811.3
5°	824.1	824.9	824.1	824.9	824.9	825.6	825.6	827.1	827.1
7.5°	849.8	851.3	850.5	852.0	852.0	853.5	852.8	855.0	855.0
10°	884.4	885.9	887.5	888.2	887.5	889.0	890.5	891.2	890.5
12.5°	923.6	924.4	923.6	925.1	925.1	926.7	926.7	928.9	928.9
15°	959.8	959.1	958.3	960.6	962.1	962.8	964.4	966.6	964.4
17.5°	992.3	993.0	991.5	993.8	996.8	999.0	1000.5	1003.6	1002.8
20°	1024.7	1023.2	1024.7	1028.4	1031.5	1034.5	1037.5	1042.0	1041.3
22.5°	1056.3	1057.9	1061.6	1064.6	1069.9	1074.4	1078.2	1084.2	1086.5
25°	1100.8	1100.8	1106.9	1110.6	1118.2	1124.2	1132.5	1139.3	1143.1
27.5°	1157.4	1157.4	1164.2	1172.5	1183.8	1194.3	1203.4	1212.4	1210.9
30°	1234.3	1238.1	1244.1	1254.6	1269.7	1282.5	1294.6	1303.7	1304.4
32.5°	1335.3	1339.8	1357.9	1385.1	1416.8	1440.9	1459.0	1480.8	1483.9
35°	1564.5	1575.8	1599.2	1621.1	1633.9	1648.2	1657.3	1658.0	1659.5
37.5°	1805.8	1786.2	1768.1	1751.5	1744.0	1742.5	1742.5	1745.5	1747.0
40°	1894.0	1884.2	1875.9	1865.4	1868.4	1867.6	1872.9	1877.4	1880.5
42.5°	2044.8	2037.3	2029.8	2016.2	2023.7	2021.5	2029.0	2035.8	2039.6
45°	2255.2	2231.8	2215.2	2193.4	2200.9	2196.4	2196.4	2204.7	2206.2
47.5°	2487.4	2460.3	2426.4	2399.2	2390.2	2381.9	2389.4	2389.4	2381.1
50°	2765.6	2733.2	2693.3	2649.5	2634.5	2626.2	2629.2	2632.9	2609.6
52.5°	3143.4	3107.2	3050.7	2984.3	2970.0	2963.2	2961.7	2956.4	2950.4
55°	3655.4	3587.5	3518.1	3430.7	3404.3	3396.7	3397.5	3391.5	3405.8
57.5°	4259.3	4159.8	3999.9	3893.6	3830.3	3806.2	3784.3	3775.2	3776.0
60°	4857.2	4654.4	4415.4	4229.9	4097.2	4012.8	3946.4	3909.5	3898.9
62.5°	5242.5	4923.6	4564.7	4263.8	4045.9	3906.4	3801.6	3735.3	3714.2
63°	5272.7	4934.9	4551.1	4228.4	3999.2	3852.9	3742.8	3674.2	3651.6
65°	5207.1	4821.0	4373.9	3989.4	3738.3	3576.2	3457.1	3392.2	3374.9
67.5°	4697.4	4376.2	3920.8	3523.4	3270.1	3105.7	2969.2	2907.4	2887.8
70°	3821.2	3601.1	3227.8	2888.5	2652.5	2494.2	2356.2	2305.0	2304.2
72.5°	2832.8	2547.0	2324.6	2075.7	1869.9	1744.0	1624.1	1566.8	1538.1
75°	1873.7	1567.6	1318.7	1109.1	904.0	790.9	656.0	597.9	564.0
77.5°	944.0	699.7	501.4	347.6	269.9	221.7	202.8	193.0	192.3
80°	314.4	236.0	202.8	190.0	186.2	187.0	184.7	181.0	176.4
82.5°	174.2	183.2	184.7	179.5	179.5	176.4	173.4	159.1	151.6
85°	149.3	164.4	165.9	162.9	162.1	157.6	152.3	132.7	121.4
87.5°	93.5	107.8	105.6	94.2	104.1	97.3	92.0	59.6	43.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)