

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: P157339

Luminaire Tested: **VST-E04-LED-E-U-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157339
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-E04-LED-E-U-5MQ-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11686.7 lumens
Efficiency: N/A
Efficacy: 120.2 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

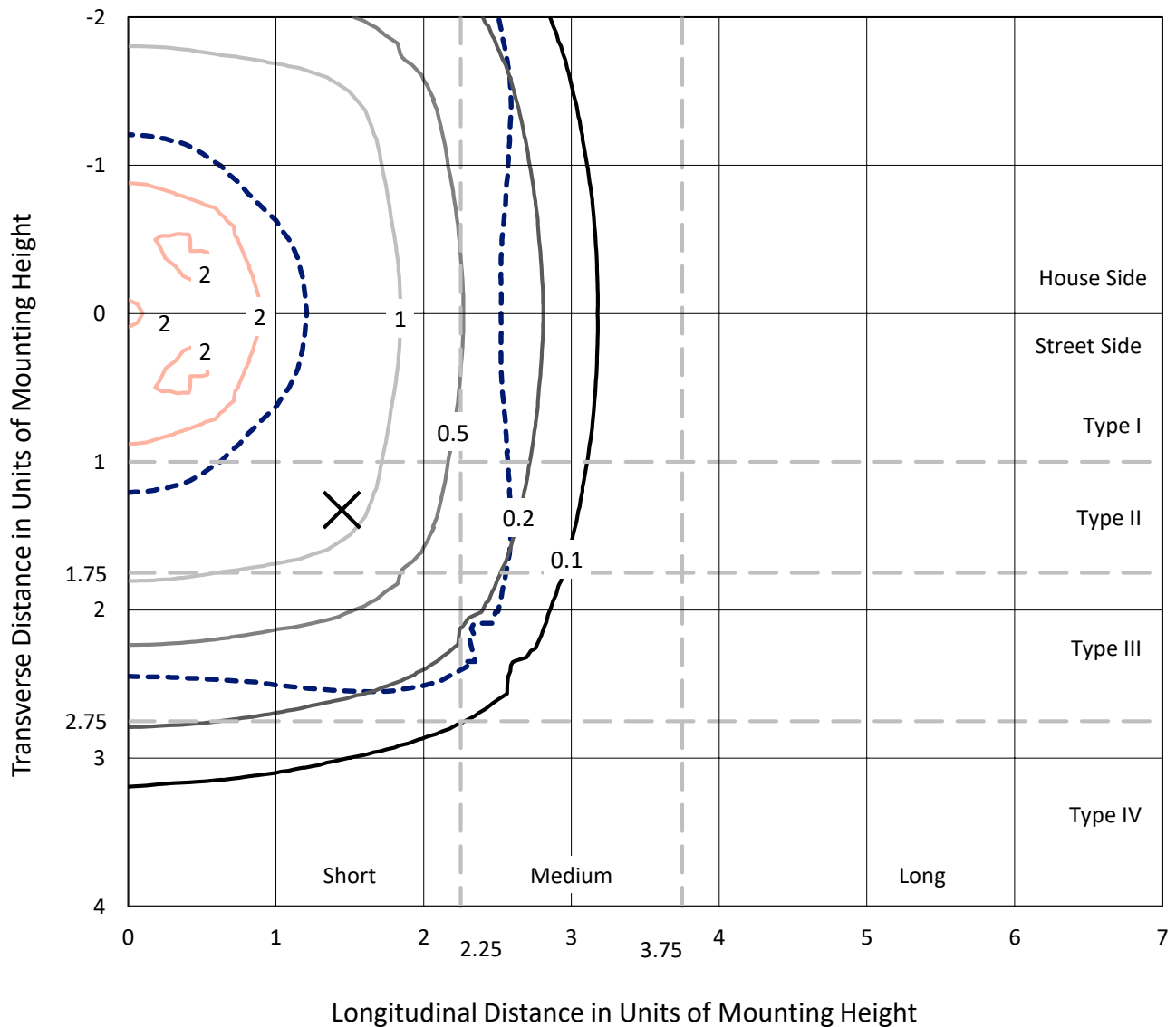
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P157339
 CATALOG NUMBER: VST-E04-LED-E-U-5MQ-7030

Iso-Footcandle Lines of Horizontal Illumination

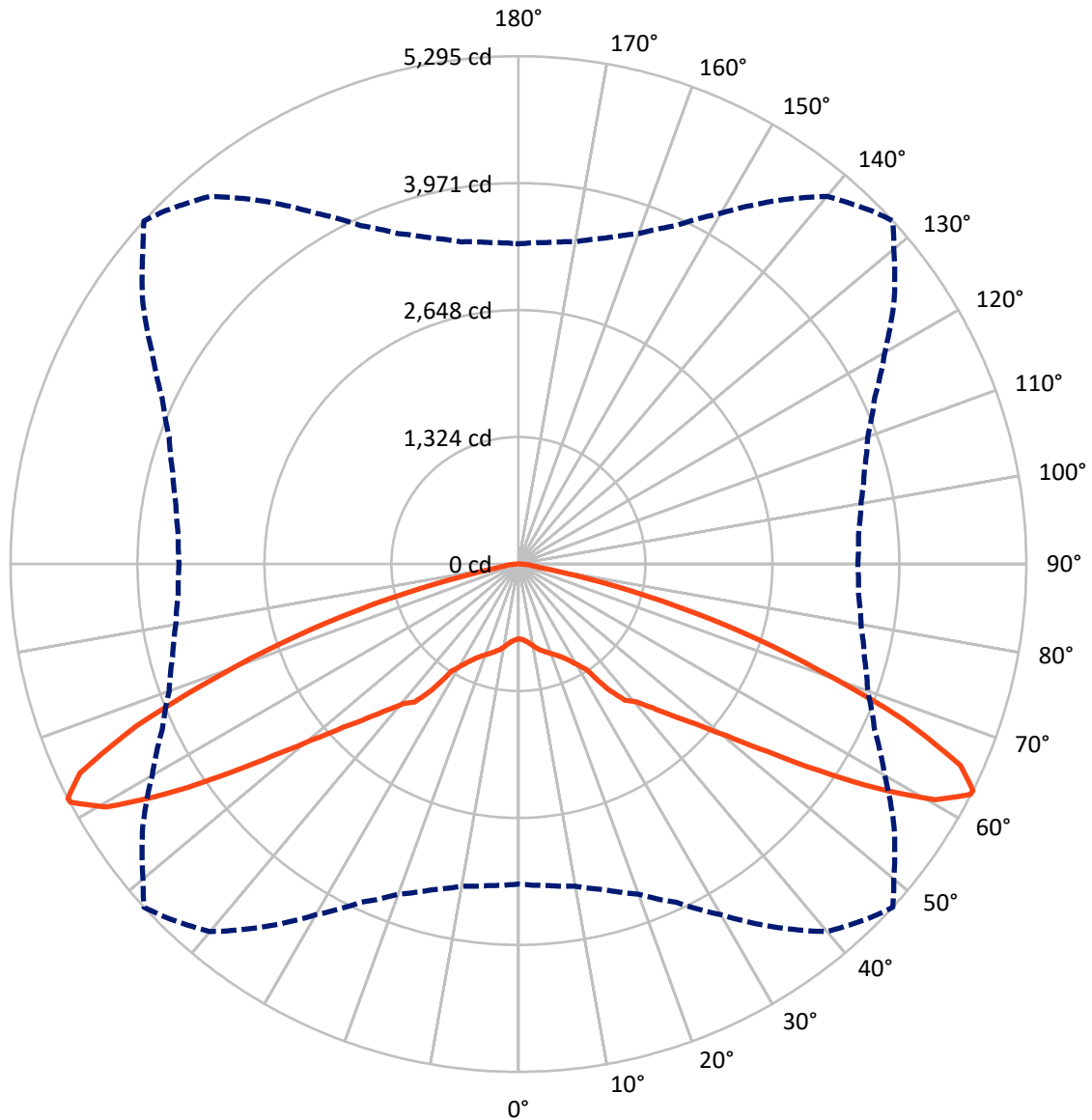
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.1 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P157339
CATALOG NUMBER: VST-E04-LED-E-U-5MQ-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P157339

CATALOG NUMBER: VST-E04-LED-E-U-5MQ-7030

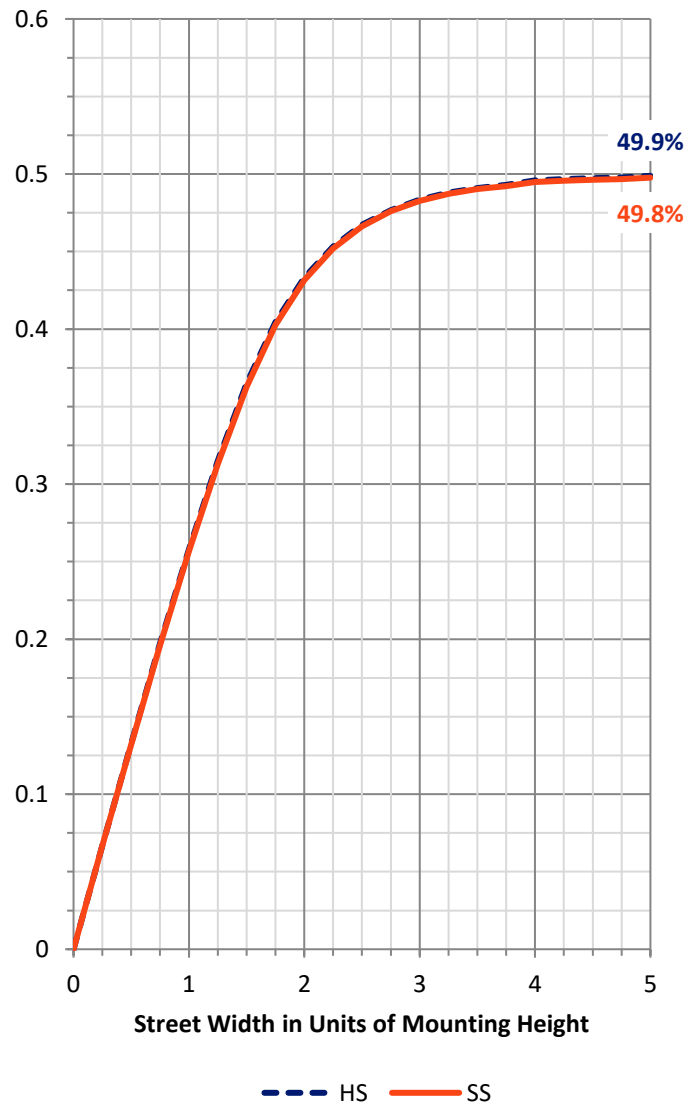
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5843.4	0.0	5843.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5843.4	0.0	5843.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	11686.7	0.0	11686.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	0.7
10°-20°	266.3	2.3
20°-30°	509.4	4.4
30°-40°	974.5	8.3
40°-50°	1686.1	14.4
50°-60°	3028.2	25.9
60°-70°	3682.3	31.5
70°-80°	1329.9	11.4
80°-90°	131.7	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°	11686.7	100.0
0°-180°	11686.7	100.0



REPORT NUMBER: P157339

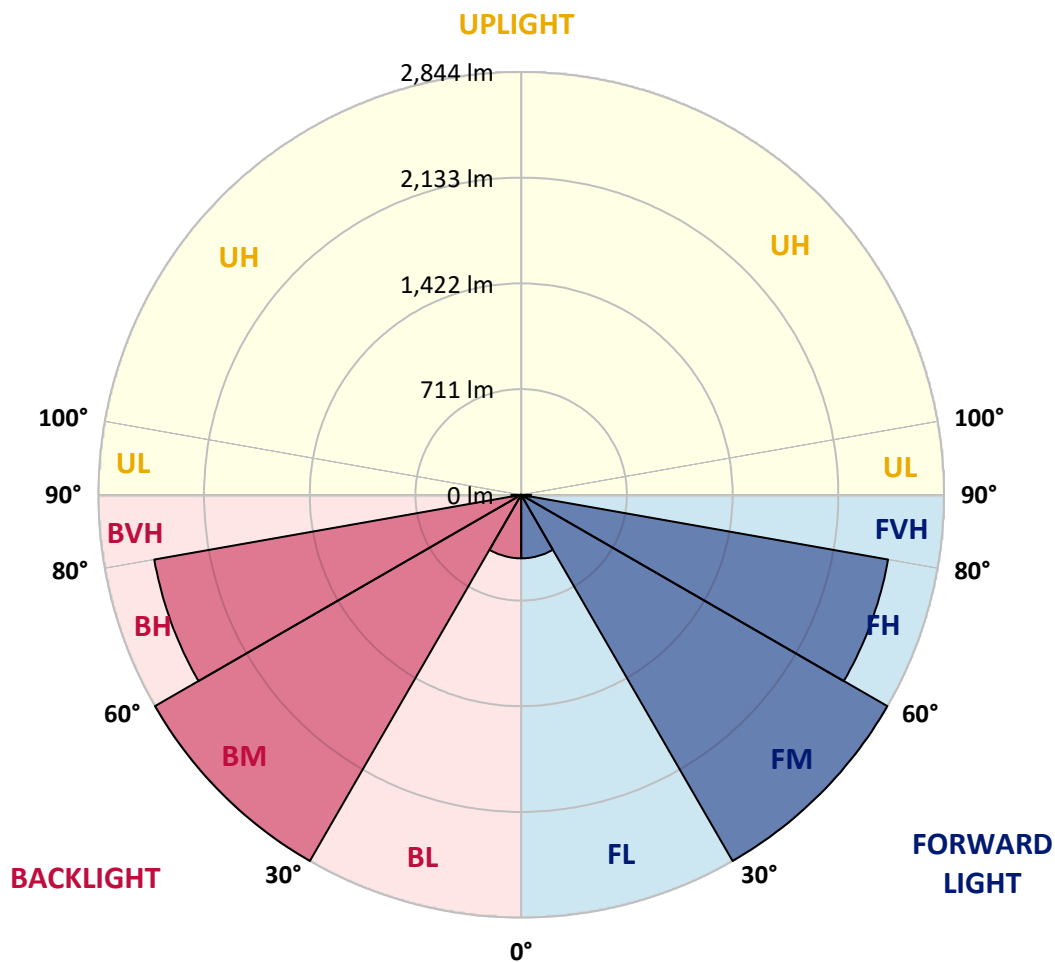
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	427.0	3.7			
FM	(30°-60°)	2844.4	24.3			
FH	(60°-80°)	2506.1	21.4			G2/5000
FVH	(80°-90°)	65.9	0.6			G1/100
BL	(0°-30°)	427.0	3.7	B1/500		
BM	(30°-60°)	2844.4	24.3	B3/5000		
BH	(60°-80°)	2506.1	21.4	B4/5000		G2/5000
BVH	(80°-90°)	65.9	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





REPORT NUMBER: P157339

CATALOG NUMBER: VST-E04-LED-E-U-5MQ-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	780.4	780.4	780.4	780.4	780.4	780.4	780.4	780.4	780.4	780.4	780.4
2.5°	785.5	784.0	784.8	785.5	784.8	784.0	784.0	784.0	785.5	784.0	787.7
5°	800.8	799.4	800.1	800.1	800.1	798.6	798.6	798.6	797.9	798.6	806.7
7.5°	830.1	827.9	827.1	828.6	827.1	826.4	825.7	825.7	824.2	824.2	834.4
10°	865.1	862.2	863.7	864.4	862.2	860.7	860.7	860.7	858.5	857.8	871.0
12.5°	903.9	902.4	902.4	900.9	900.2	898.7	898.0	898.7	895.8	895.8	909.0
15°	941.1	938.2	938.9	936.7	935.3	933.8	933.1	932.3	930.9	930.9	938.9
17.5°	975.5	973.3	972.5	970.3	968.2	966.0	964.5	963.8	961.6	961.6	968.9
20°	1011.3	1009.1	1007.6	1004.0	1000.3	998.1	995.2	993.7	990.8	991.5	999.6
22.5°	1052.2	1048.5	1045.6	1042.7	1036.1	1031.7	1028.1	1025.1	1023.7	1023.7	1034.6
25°	1107.0	1104.8	1100.4	1090.9	1082.9	1076.3	1070.4	1067.5	1064.6	1063.1	1079.9
27.5°	1174.2	1172.0	1166.2	1156.7	1145.7	1134.7	1128.2	1123.1	1119.4	1117.2	1141.3
30°	1263.3	1259.7	1254.6	1239.2	1229.7	1212.9	1205.6	1198.3	1190.3	1192.5	1221.0
32.5°	1438.0	1432.9	1416.8	1400.0	1370.8	1348.1	1324.7	1307.2	1290.4	1288.2	1318.9
35°	1596.5	1594.3	1591.4	1579.7	1568.8	1554.9	1543.9	1525.7	1510.3	1506.7	1592.9
37.5°	1682.0	1687.1	1682.8	1681.3	1681.3	1687.9	1708.3	1728.8	1743.4	1752.2	1800.4
40°	1812.8	1812.8	1807.7	1804.8	1798.9	1807.7	1816.5	1831.8	1838.4	1839.1	1888.1
42.5°	1961.1	1961.9	1956.8	1948.0	1945.1	1953.1	1964.8	1979.4	1988.2	1990.4	2047.4
45°	2126.3	2124.1	2119.7	2116.8	2119.0	2126.3	2140.2	2168.7	2181.8	2192.0	2254.1
47.5°	2305.3	2319.9	2307.5	2309.7	2309.7	2332.3	2363.8	2387.1	2408.3	2428.1	2493.8
50°	2539.8	2542.0	2544.2	2550.8	2555.2	2585.1	2624.6	2652.4	2683.1	2708.6	2816.0
52.5°	2853.3	2848.9	2859.9	2867.2	2892.0	2908.1	2973.9	3008.9	3051.3	3084.2	3241.3
55°	3228.1	3226.0	3242.0	3247.9	3280.8	3320.2	3393.3	3470.0	3542.3	3582.5	3797.3
57.5°	3497.0	3502.9	3530.6	3569.4	3633.7	3717.7	3826.6	3996.1	4133.5	4177.3	4414.0
60°	3556.2	3575.2	3616.9	3694.3	3804.7	3961.0	4175.1	4434.5	4685.9	4769.9	4992.0
62.5°	3390.4	3412.3	3473.7	3566.5	3710.4	3942.0	4251.1	4617.2	4990.5	5177.6	5289.4
63°	3337.7	3364.8	3410.8	3518.2	3664.4	3893.1	4221.9	4616.4	5003.7	5207.6	5295.2
65°	3090.8	3095.9	3164.6	3272.0	3436.4	3673.9	4005.6	4461.5	4891.2	5126.5	5065.8
67.5°	2659.7	2680.9	2738.6	2846.7	3006.7	3253.7	3613.9	4035.5	4413.3	4601.1	4330.0
70°	2148.9	2147.5	2219.1	2306.0	2447.0	2664.1	2979.7	3360.4	3660.0	3796.6	3342.9
72.5°	1535.2	1497.2	1549.8	1646.2	1761.7	1934.8	2184.7	2480.7	2748.8	2867.2	2444.1
75°	699.3	689.0	735.8	831.5	948.4	1102.6	1307.9	1563.7	1820.9	1959.7	1557.1
77.5°	235.3	238.2	256.5	290.8	353.6	431.1	559.0	722.6	930.9	1068.3	730.7
80°	157.8	162.2	168.1	173.2	180.5	192.2	219.9	262.3	326.6	395.3	230.9
82.5°	129.3	134.4	147.6	153.4	157.8	161.5	163.7	166.6	166.6	168.1	146.1
85°	92.8	101.6	119.1	130.1	134.4	137.4	141.0	145.4	138.8	133.0	113.3
87.5°	32.1	43.8	64.3	70.9	76.0	76.7	81.8	90.6	86.2	70.1	34.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P157339

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	780.4	780.4	780.4	780.4	780.4	780.4	780.4	780.4	780.4
2.5°	784.0	783.3	784.0	784.8	784.8	784.8	785.5	786.2	786.2
5°	798.6	799.4	798.6	799.4	799.4	800.1	800.1	801.6	801.6
7.5°	823.5	824.9	824.2	825.7	825.7	827.1	826.4	828.6	828.6
10°	857.1	858.5	860.0	860.7	860.0	861.5	862.9	863.7	862.9
12.5°	895.1	895.8	895.1	896.5	896.5	898.0	898.0	900.2	900.2
15°	930.2	929.4	928.7	930.9	932.3	933.1	934.5	936.7	934.5
17.5°	961.6	962.3	960.8	963.0	966.0	968.2	969.6	972.5	971.8
20°	993.0	991.5	993.0	996.6	999.6	1002.5	1005.4	1009.8	1009.1
22.5°	1023.7	1025.1	1028.8	1031.7	1036.8	1041.2	1044.9	1050.7	1052.9
25°	1066.8	1066.8	1072.6	1076.3	1083.6	1089.4	1097.5	1104.1	1107.7
27.5°	1121.6	1121.6	1128.2	1136.2	1147.2	1157.4	1166.2	1174.9	1173.5
30°	1196.1	1199.8	1205.6	1215.9	1230.5	1242.9	1254.6	1263.3	1264.1
32.5°	1294.0	1298.4	1316.0	1342.3	1372.9	1396.3	1413.9	1435.1	1438.0
35°	1516.2	1527.1	1549.8	1571.0	1583.4	1597.3	1606.0	1606.8	1608.2
37.5°	1750.0	1731.0	1713.4	1697.4	1690.1	1688.6	1688.6	1691.5	1693.0
40°	1835.5	1826.0	1817.9	1807.7	1810.6	1809.9	1815.0	1819.4	1822.3
42.5°	1981.6	1974.3	1967.0	1953.8	1961.1	1959.0	1966.3	1972.8	1976.5
45°	2185.5	2162.8	2146.7	2125.5	2132.9	2128.5	2128.5	2136.5	2138.0
47.5°	2410.5	2384.2	2351.3	2325.0	2316.3	2308.2	2315.5	2315.5	2307.5
50°	2680.1	2648.7	2610.0	2567.6	2553.0	2545.0	2547.9	2551.5	2528.9
52.5°	3046.2	3011.1	2956.3	2892.0	2878.1	2871.6	2870.1	2865.0	2859.2
55°	3542.3	3476.6	3409.4	3324.6	3299.0	3291.7	3292.4	3286.6	3300.5
57.5°	4127.6	4031.2	3876.3	3773.2	3711.9	3688.5	3667.3	3658.5	3659.2
60°	4707.0	4510.5	4278.9	4099.1	3970.5	3888.7	3824.4	3788.6	3778.3
62.5°	5080.4	4771.3	4423.5	4132.0	3920.8	3785.7	3684.1	3619.8	3599.3
63°	5109.6	4782.3	4410.4	4097.7	3875.5	3733.8	3627.1	3560.6	3538.7
65°	5046.1	4672.0	4238.7	3866.0	3622.7	3465.6	3350.2	3287.3	3270.5
67.5°	4552.1	4240.9	3799.5	3414.5	3169.0	3009.7	2877.4	2817.5	2798.5
70°	3703.1	3489.7	3128.0	2799.2	2570.5	2417.1	2283.4	2233.7	2233.0
72.5°	2745.2	2468.2	2252.7	2011.6	1812.1	1690.1	1573.9	1518.4	1490.6
75°	1815.7	1519.1	1278.0	1074.8	876.1	766.5	635.7	579.4	546.5
77.5°	914.8	678.1	485.9	336.8	261.6	214.8	196.6	187.1	186.3
80°	304.7	228.7	196.6	184.1	180.5	181.2	179.0	175.4	171.0
82.5°	168.8	177.6	179.0	173.9	173.9	171.0	168.1	154.2	146.9
85°	144.7	159.3	160.7	157.8	157.1	152.7	147.6	128.6	117.6
87.5°	90.6	104.5	102.3	91.3	100.8	94.3	89.1	57.7	42.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)