

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: P397538

Luminaire Tested: **ARCH-S-PA1-100-727-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-100-727-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6724 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 96
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

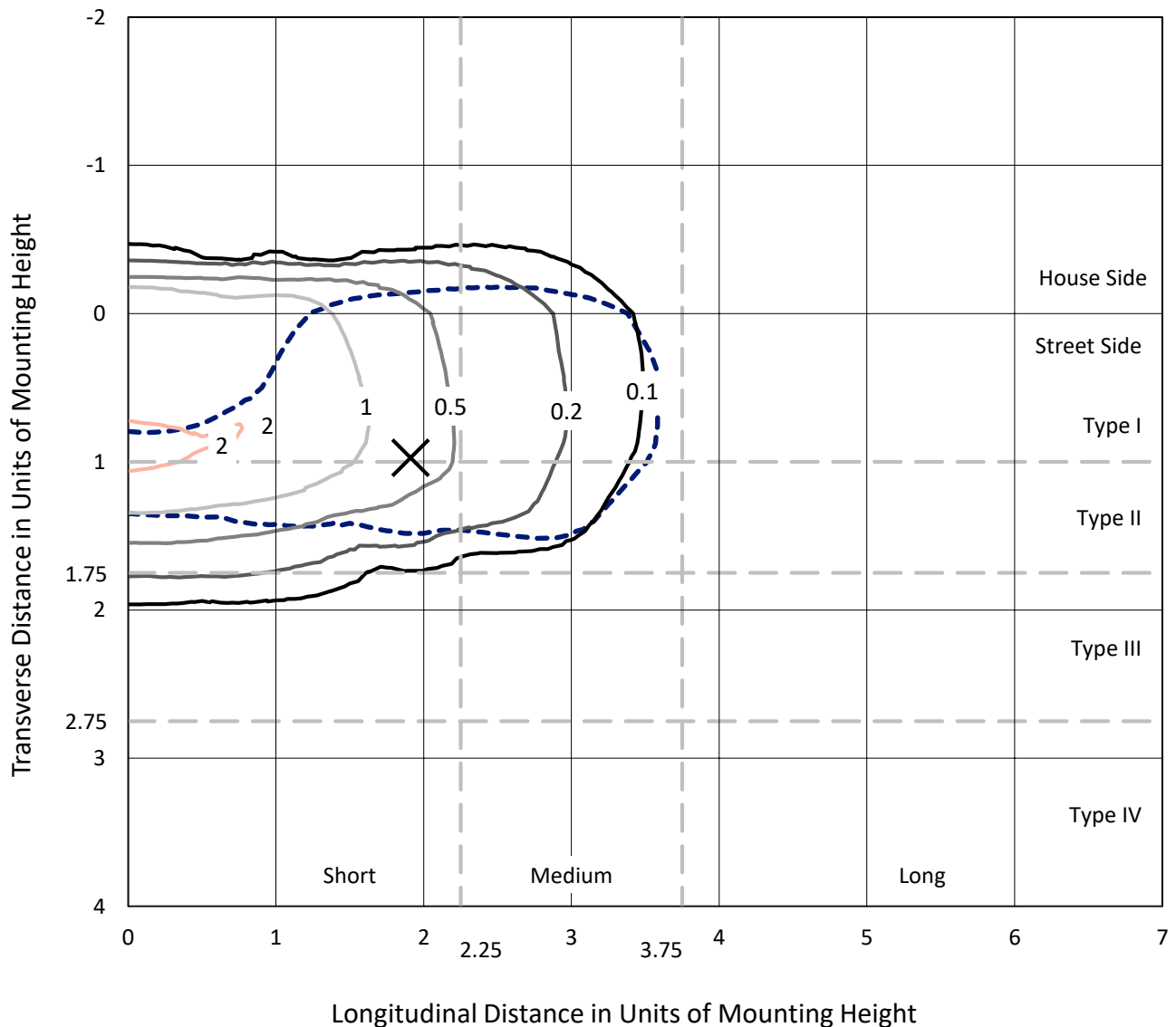


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

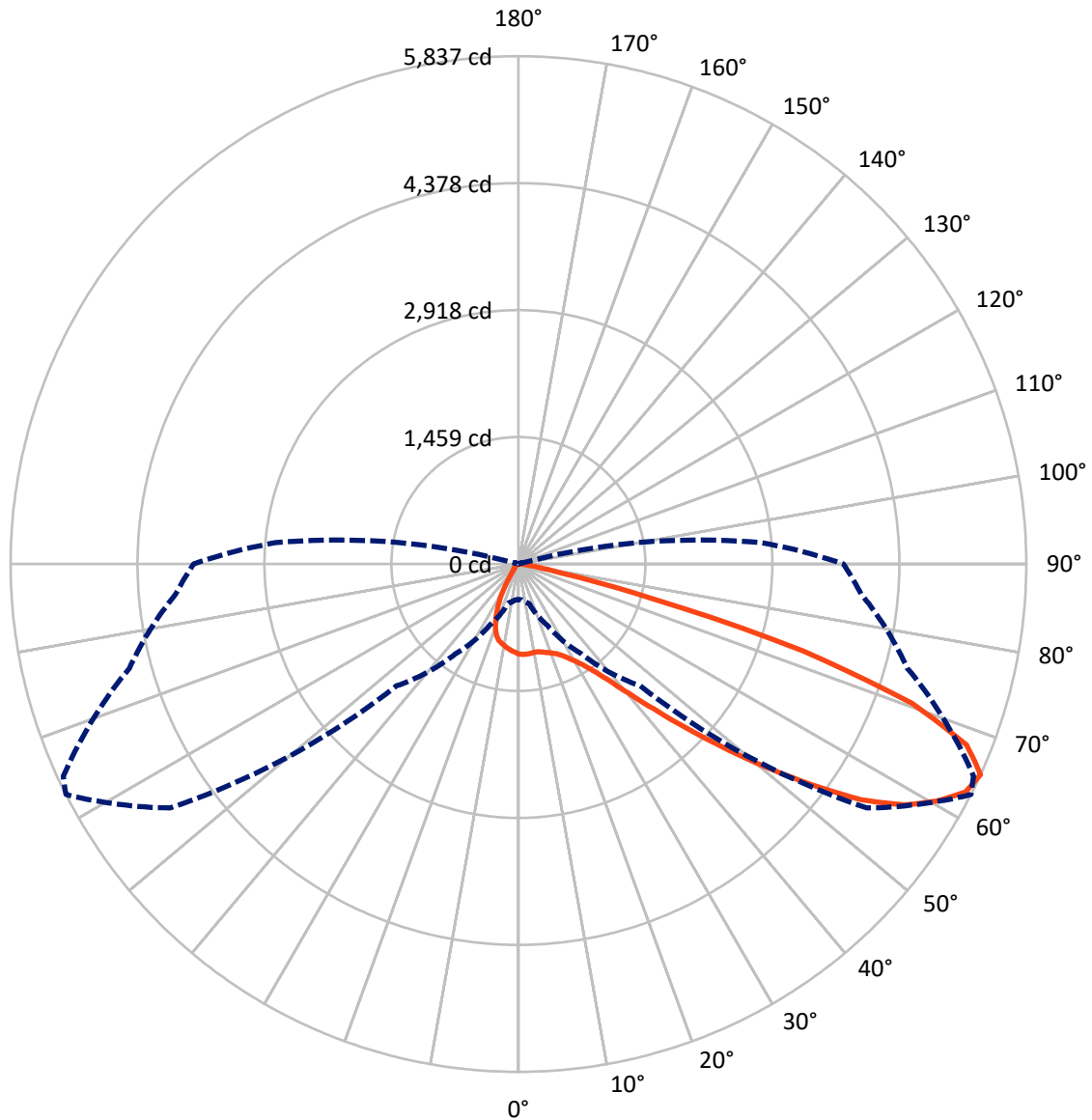


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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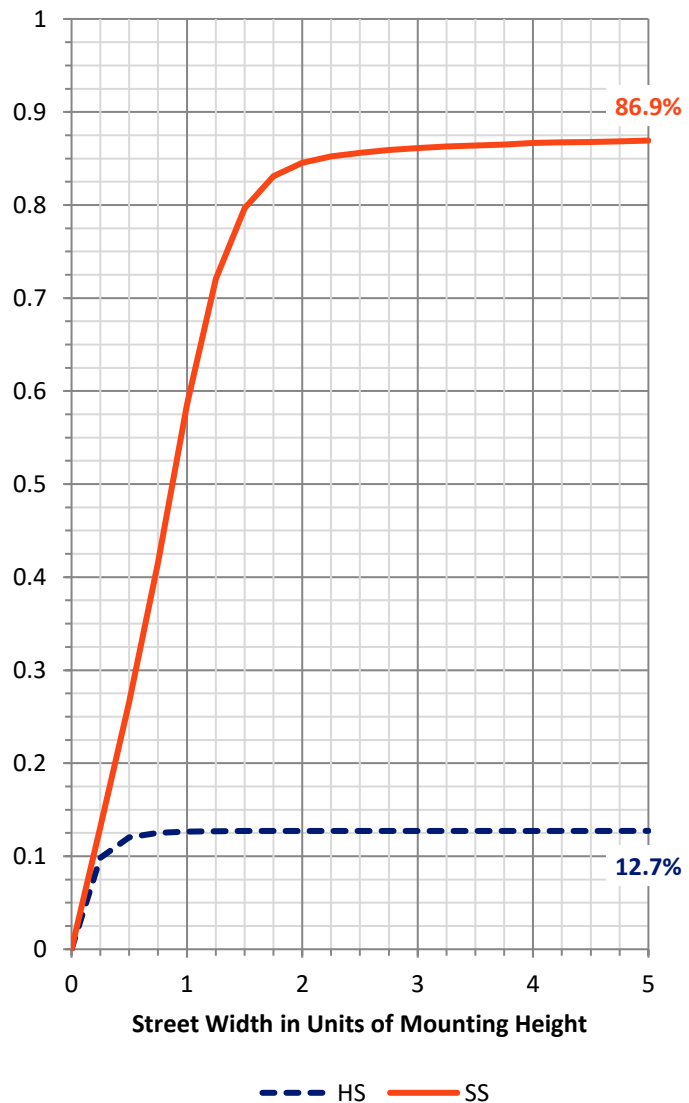
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	865.4	0.0	865.4
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5858.6	0.0	5858.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	6724.0	0.0	6724.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	1.4
10°-20°	233.2	3.5
20°-30°	345.6	5.1
30°-40°	641.7	9.5
40°-50°	1359.4	20.2
50°-60°	1879.6	28.0
60°-70°	1504.7	22.4
70°-80°	625.2	9.3
80°-90°	40.1	0.6
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°	6724.0	100.0
0°-180°	6724.0	100.0

Coefficient of Utilization



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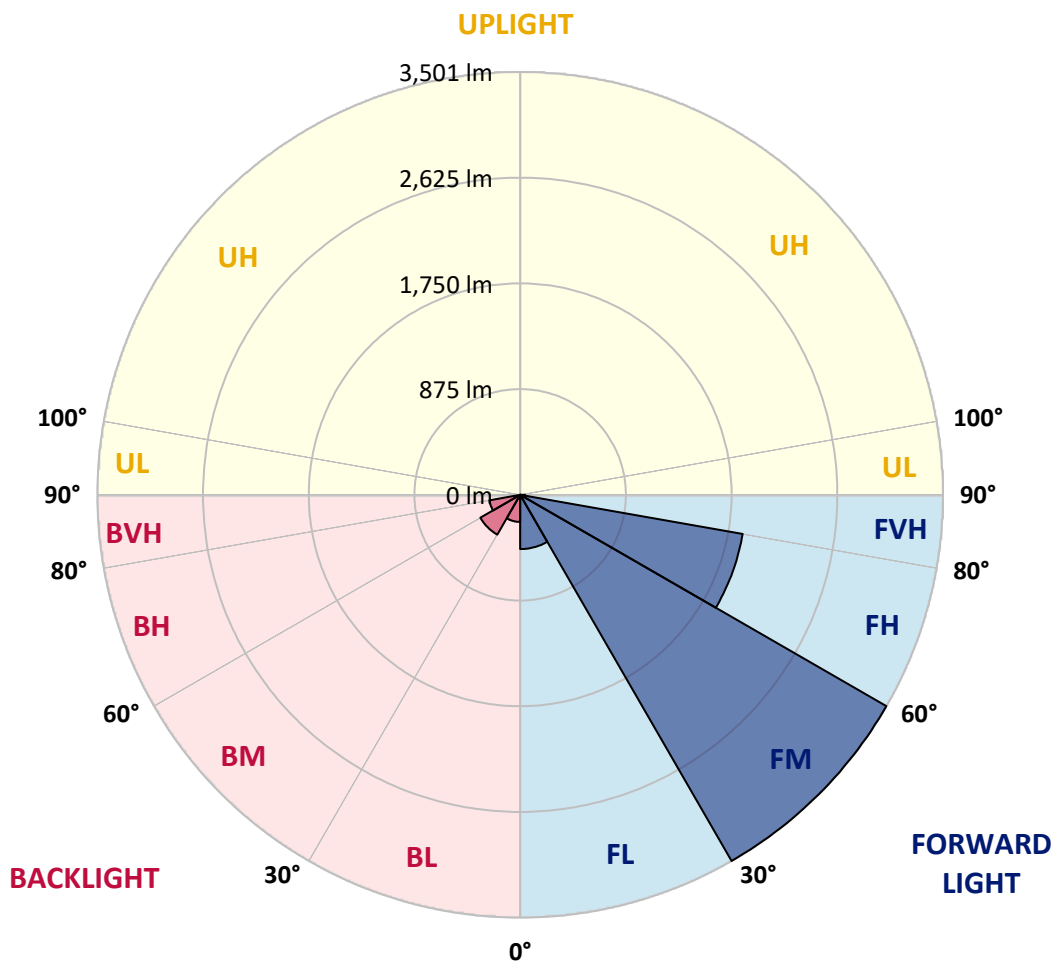
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	449.0	6.7			
FM	(30°-60°)	3500.5	52.1			
FH	(60°-80°)	1870.8	27.8			G2/5000
FVH	(80°-90°)	38.3	0.6			G1/100
BL	(0°-30°)	224.3	3.3	B1/500		
BM	(30°-60°)	380.1	5.7	B1/1000		
BH	(60°-80°)	259.1	3.9	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8
2.5°	1053.6	1051.1	1048.5	1047.3	1047.3	1046.0	1040.9	1039.6	1037.1	1034.6	1032.0
5°	1043.5	1039.6	1038.4	1039.6	1040.9	1043.5	1040.9	1040.9	1038.4	1035.8	1030.8
7.5°	1018.1	1015.5	1016.8	1020.6	1021.9	1030.8	1032.0	1035.8	1035.8	1033.3	1029.5
10°	987.6	986.3	986.3	992.7	999.0	1011.7	1020.6	1030.8	1032.0	1032.0	1025.7
12.5°	964.7	963.5	967.3	974.9	987.6	1004.1	1019.3	1034.6	1037.1	1038.4	1028.2
15°	950.8	950.8	955.9	971.1	988.9	1011.7	1029.5	1049.8	1052.3	1051.1	1037.1
17.5°	938.1	939.4	949.5	974.9	995.2	1025.7	1047.3	1070.1	1071.4	1070.1	1047.3
20°	933.0	935.6	950.8	983.8	1006.6	1040.9	1068.8	1091.7	1093.0	1087.9	1057.4
22.5°	947.0	948.2	967.3	1002.8	1024.4	1062.5	1098.0	1119.6	1120.9	1113.3	1072.6
25°	995.2	995.2	1011.7	1042.2	1061.2	1099.3	1137.4	1162.8	1162.8	1153.9	1106.9
27.5°	1108.2	1098.0	1094.2	1103.1	1109.5	1150.1	1190.7	1222.4	1221.2	1208.5	1151.4
30°	1326.5	1301.1	1260.5	1214.8	1192.0	1219.9	1258.0	1298.6	1297.3	1277.0	1205.9
32.5°	1693.4	1656.6	1560.1	1439.5	1341.8	1310.0	1345.6	1390.0	1391.3	1367.2	1293.5
35°	2207.5	2149.1	1976.5	1808.9	1585.5	1464.9	1475.1	1523.3	1538.5	1525.8	1440.8
37.5°	2702.6	2649.3	2484.2	2251.9	1948.5	1702.3	1659.1	1701.0	1718.8	1718.8	1628.6
40°	3201.4	3139.2	2993.3	2759.7	2439.8	2072.9	1918.1	1952.3	1971.4	1975.2	1857.1
42.5°	3601.3	3560.7	3449.0	3267.5	2967.9	2722.9	2291.3	2272.2	2290.0	2276.0	2122.4
45°	3878.0	3846.3	3768.9	3700.3	3554.3	3431.2	2790.2	2661.9	2673.4	2625.1	2420.8
47.5°	3935.2	3899.6	3883.1	3978.3	4082.4	4112.9	3403.3	3125.3	3113.9	3007.2	2730.5
50°	3686.4	3690.2	3751.1	4022.7	4456.9	4731.1	4114.1	3648.3	3606.4	3369.0	3018.6
52.5°	3149.4	3210.3	3363.9	3804.4	4571.1	5180.4	4825.0	4203.0	4138.3	3720.6	3234.4
55°	2463.9	2542.6	2795.2	3301.7	4332.5	5381.0	5424.2	4779.3	4632.1	3984.7	3402.0
57.5°	1831.8	1855.9	2150.4	2612.4	3767.6	5184.3	5731.4	5223.6	5034.5	4195.4	3568.3
60°	1141.2	1156.4	1467.4	1989.2	2853.6	4456.9	5731.4	5529.5	5349.3	4384.5	3720.6
62.5°	709.6	714.7	831.5	1363.3	1939.7	3305.5	5494.0	5766.9	5622.2	4520.4	3851.4
65°	408.7	413.8	468.4	770.5	1261.8	1979.0	4887.2	5836.7	5772.0	4628.3	3952.9
67.5°	298.3	300.8	322.4	432.9	825.1	1016.8	3671.1	5556.2	5637.4	4681.6	3950.4
70°	259.0	262.8	290.7	337.7	595.4	624.5	1868.6	4798.4	5025.6	4605.4	3832.3
72.5°	199.3	204.4	246.3	317.4	436.7	449.4	676.6	3414.7	3758.7	4129.4	3508.6
75°	137.1	142.2	184.1	261.5	360.5	336.4	371.9	1571.5	1982.8	2769.8	2670.8
77.5°	87.6	88.9	115.5	190.4	311.0	238.6	255.2	512.8	719.8	1252.9	1260.5
80°	58.4	59.7	71.1	123.1	213.3	220.9	157.4	237.4	260.2	365.6	253.9
82.5°	35.5	35.5	48.2	77.4	129.5	182.8	102.8	124.4	133.3	140.9	66.0
85°	14.0	14.0	29.2	50.8	81.2	85.1	64.7	72.4	76.2	82.5	30.5
87.5°	3.8	3.8	16.5	27.9	35.5	39.4	39.4	35.5	38.1	47.0	15.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8	1035.8
2.5°	1030.8	1026.9	1021.9	1016.8	1011.7	1007.9	1004.1	1004.1	1001.6	997.8	995.2
5°	1028.2	1021.9	1010.4	1001.6	987.6	977.4	969.8	963.5	959.7	950.8	949.5
7.5°	1024.4	1016.8	1000.3	982.5	959.7	941.9	924.1	911.4	898.7	888.6	886.0
10°	1018.1	1009.2	985.1	959.7	927.9	894.9	853.0	804.8	760.4	735.0	727.4
12.5°	1018.1	1006.6	974.9	940.6	894.9	813.7	707.1	600.4	517.9	481.1	470.9
15°	1024.4	1009.2	967.3	920.3	835.3	670.2	497.6	356.7	266.6	238.6	232.3
17.5°	1030.8	1009.2	955.9	892.4	726.1	486.2	283.1	187.9	158.7	152.3	152.3
20°	1033.3	1006.6	940.6	840.3	580.1	302.1	168.8	140.9	129.5	125.7	125.7
22.5°	1043.5	1007.9	929.2	765.5	421.4	177.7	133.3	118.1	106.6	102.8	102.8
25°	1068.8	1023.1	931.7	670.2	270.4	134.6	113.0	97.7	86.3	81.2	81.2
27.5°	1109.5	1057.4	945.7	559.8	170.1	115.5	95.2	78.7	69.8	64.7	64.7
30°	1155.2	1095.5	952.1	432.9	126.9	97.7	77.4	62.2	55.9	52.0	50.8
32.5°	1235.1	1161.5	947.0	297.0	104.1	82.5	62.2	49.5	44.4	43.2	43.2
35°	1363.3	1277.0	936.8	186.6	86.3	66.0	49.5	40.6	36.8	35.5	34.3
37.5°	1537.3	1445.9	906.4	123.1	71.1	52.0	40.6	34.3	30.5	29.2	29.2
40°	1749.2	1638.8	848.0	93.9	60.9	41.9	34.3	29.2	26.7	25.4	25.4
42.5°	1991.7	1853.3	755.3	81.2	50.8	35.5	29.2	24.1	22.8	21.6	21.6
45°	2257.0	2078.0	627.1	72.4	43.2	29.2	24.1	21.6	19.0	19.0	17.8
47.5°	2538.8	2304.0	482.4	63.5	36.8	25.4	21.6	17.8	16.5	15.2	15.2
50°	2810.5	2505.8	338.9	54.6	30.5	21.6	17.8	15.2	14.0	12.7	12.7
52.5°	3002.1	2627.7	239.9	47.0	25.4	19.0	14.0	11.4	10.2	10.2	10.2
55°	3155.7	2703.8	167.6	39.4	21.6	16.5	11.4	8.9	8.9	7.6	7.6
57.5°	3300.5	2753.3	123.1	33.0	17.8	12.7	8.9	6.3	6.3	5.1	5.1
60°	3450.2	2780.0	93.9	26.7	15.2	10.2	6.3	5.1	3.8	3.8	3.8
62.5°	3601.3	2796.5	72.4	21.6	12.7	7.6	5.1	3.8	2.5	1.3	1.3
65°	3733.3	2801.6	55.9	16.5	10.2	5.1	3.8	1.3	0.0	0.0	0.0
67.5°	3772.7	2743.2	43.2	12.7	7.6	3.8	2.5	0.0	0.0	0.0	0.0
70°	3666.0	2588.3	33.0	10.2	6.3	2.5	1.3	0.0	0.0	0.0	0.0
72.5°	3253.5	2170.7	25.4	6.3	5.1	2.5	1.3	0.0	0.0	0.0	0.0
75°	2328.1	1157.7	17.8	5.1	3.8	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	1071.4	448.1	12.7	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0
80°	209.5	111.7	5.1	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.2	19.0	2.5	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.5	6.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)