

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: P398114

Luminaire Tested: **ARCH-S-PA1-90-727-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398114
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-PA1-90-727-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA 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: 6656 lumens
Efficiency: N/A
Efficacy: 70.8 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

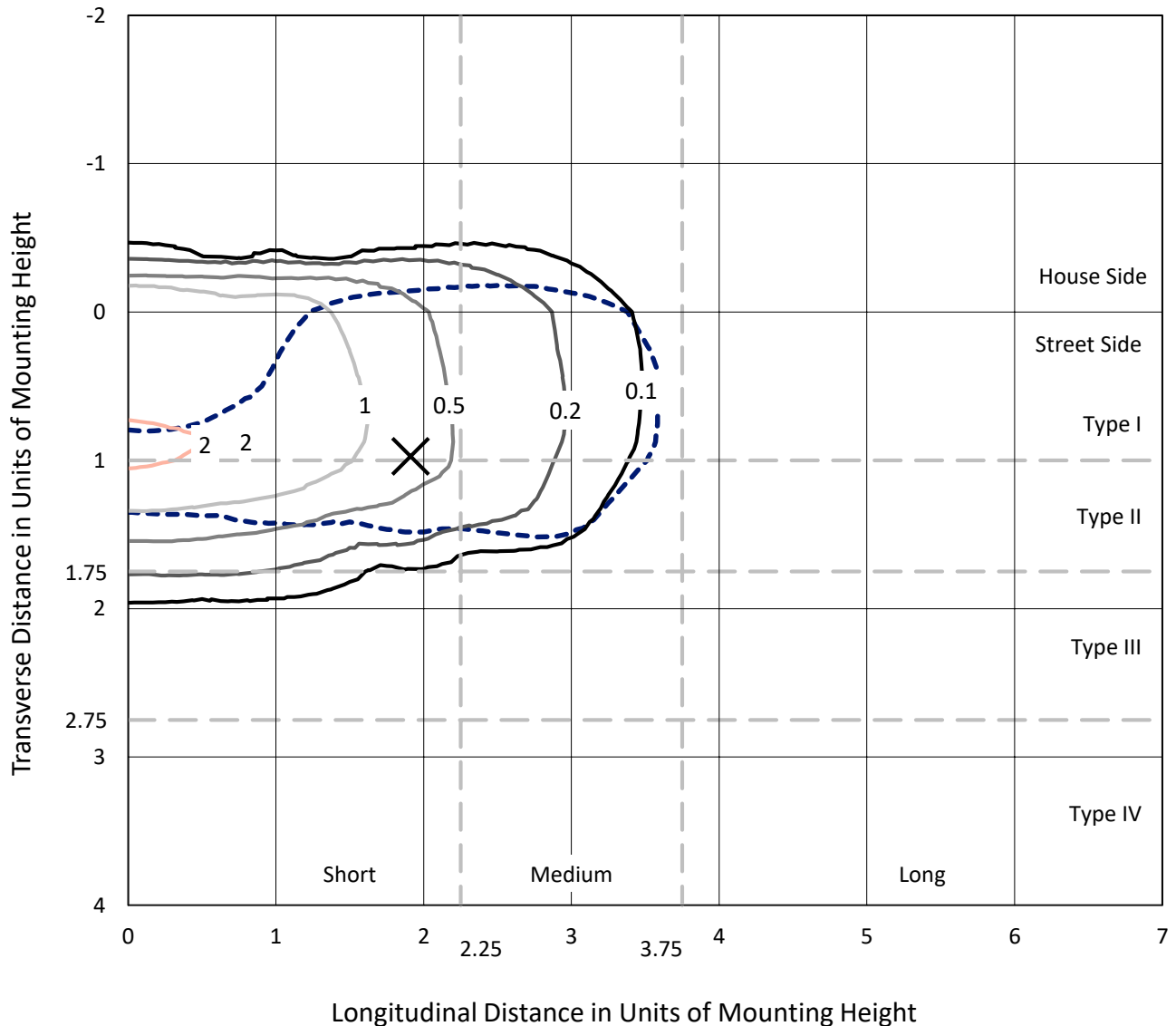
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

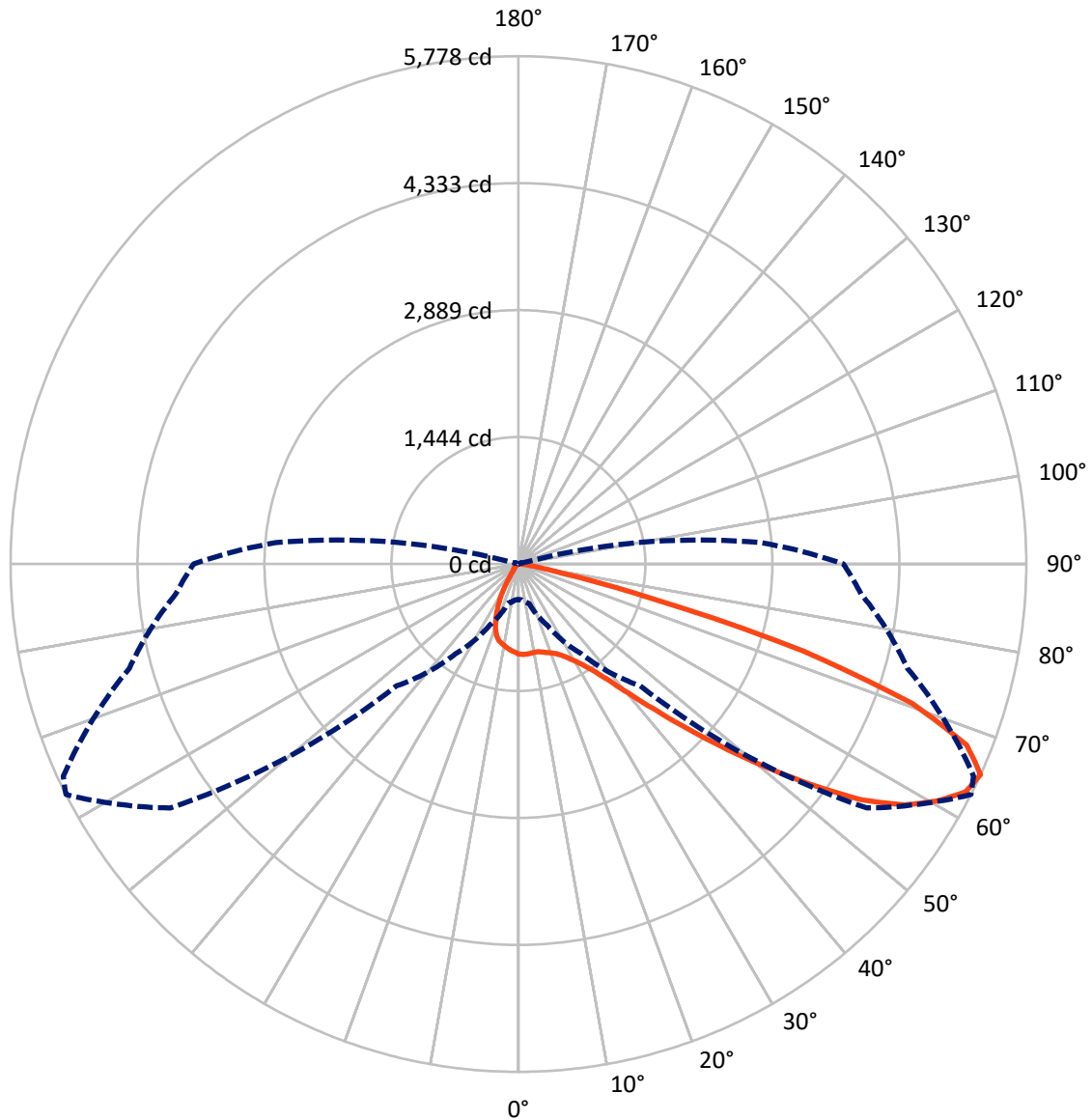
× Max cd
 - - - 1/2 Max cd



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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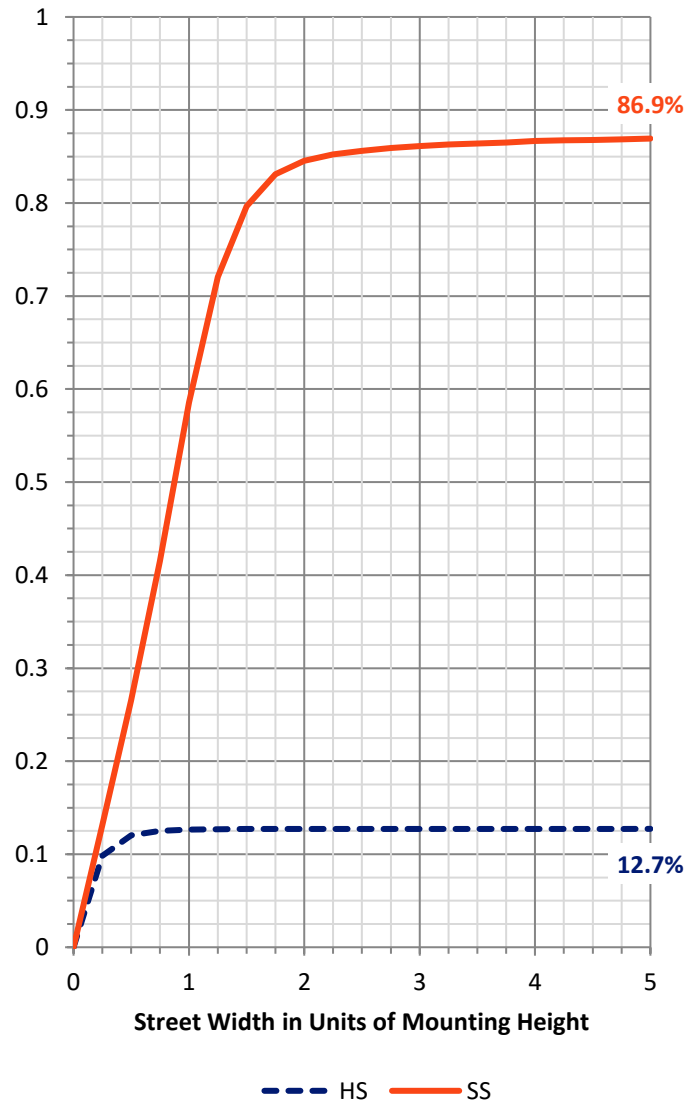
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	856.6	0.0	856.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5799.4	0.0	5799.4
	% Fixture	87.1	0.0	87.1
Total	Lumens	6656.0	0.0	6656.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.6	1.4
10°-20°	230.8	3.5
20°-30°	342.1	5.1
30°-40°	635.2	9.5
40°-50°	1345.6	20.2
50°-60°	1860.6	28.0
60°-70°	1489.5	22.4
70°-80°	618.9	9.3
80°-90°	39.7	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°	6656.0	100.0
0°-180°	6656.0	100.0



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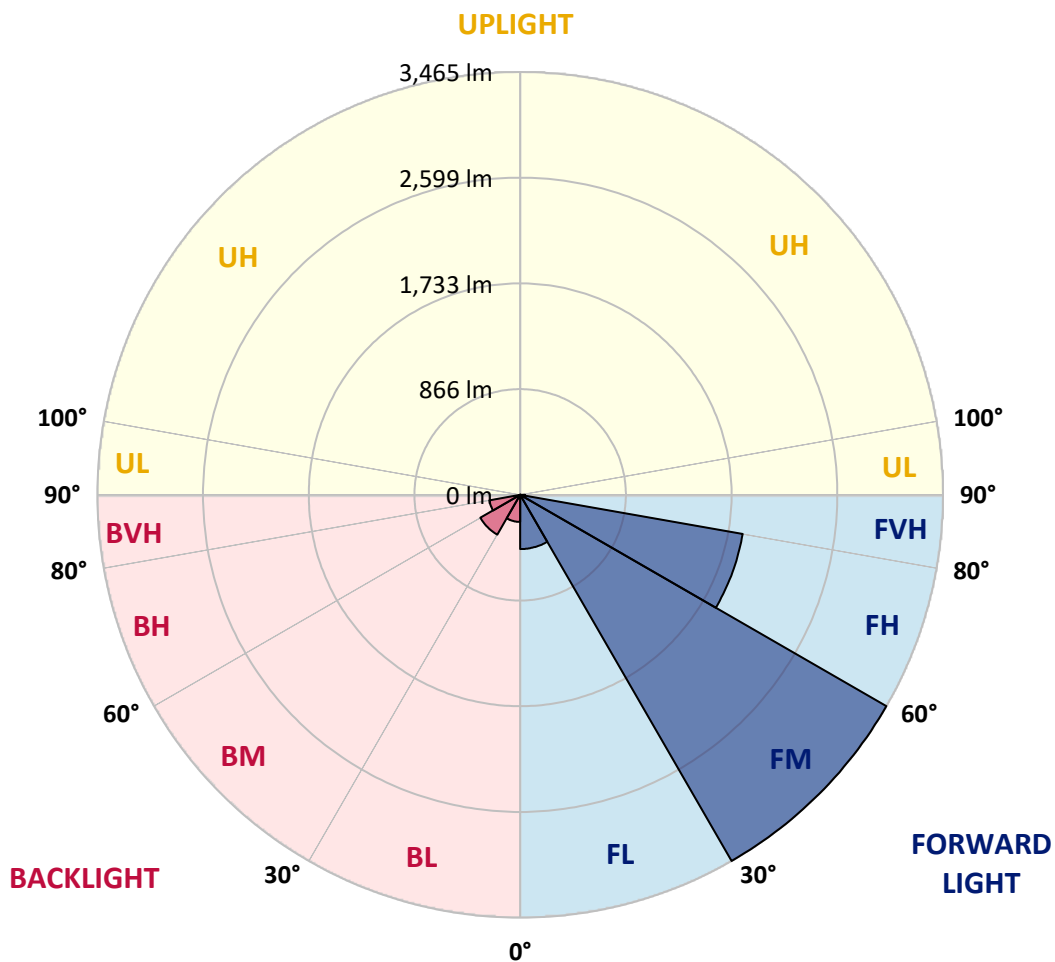
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	444.5	6.7			
FM	(30°-60°)	3465.1	52.1			
FH	(60°-80°)	1851.8	27.8			G2/5000
FVH	(80°-90°)	37.9	0.6			G1/100
BL	(0°-30°)	222.0	3.3	B1/500		
BM	(30°-60°)	376.3	5.7	B1/1000		
BH	(60°-80°)	256.5	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°	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4
2.5°	1043.0	1040.4	1037.9	1036.7	1036.7	1035.4	1030.4	1029.1	1026.6	1024.1	1021.6
5°	1032.9	1029.1	1027.9	1029.1	1030.4	1032.9	1030.4	1030.4	1027.9	1025.4	1020.3
7.5°	1007.8	1005.3	1006.5	1010.3	1011.5	1020.3	1021.6	1025.4	1025.4	1022.8	1019.1
10°	977.6	976.4	976.4	982.6	988.9	1001.5	1010.3	1020.3	1021.6	1021.6	1015.3
12.5°	955.0	953.7	957.5	965.0	977.6	993.9	1009.0	1024.1	1026.6	1027.9	1017.8
15°	941.2	941.2	946.2	961.3	978.9	1001.5	1019.1	1039.2	1041.7	1040.4	1026.6
17.5°	928.6	929.9	939.9	965.0	985.2	1015.3	1036.7	1059.3	1060.5	1059.3	1036.7
20°	923.6	926.1	941.2	973.8	996.5	1030.4	1058.0	1080.6	1081.9	1076.9	1046.7
22.5°	937.4	938.7	957.5	992.7	1014.1	1051.7	1086.9	1108.3	1109.6	1102.0	1061.8
25°	985.2	985.2	1001.5	1031.6	1050.5	1088.2	1125.9	1151.0	1151.0	1142.2	1095.7
27.5°	1097.0	1086.9	1083.2	1092.0	1098.2	1138.5	1178.7	1210.1	1208.8	1196.3	1139.7
30°	1313.1	1288.0	1247.8	1202.5	1179.9	1207.6	1245.3	1285.5	1284.2	1264.1	1193.7
32.5°	1676.3	1639.8	1544.3	1424.9	1328.2	1296.8	1332.0	1375.9	1377.2	1353.3	1280.4
35°	2185.2	2127.4	1956.5	1790.6	1569.5	1450.1	1460.1	1507.9	1523.0	1510.4	1426.2
37.5°	2675.2	2622.5	2459.1	2229.2	1928.8	1685.1	1642.3	1683.8	1701.4	1701.4	1612.2
40°	3169.1	3107.5	2963.0	2731.8	2415.1	2052.0	1898.7	1932.6	1951.5	1955.2	1838.4
42.5°	3564.9	3524.7	3414.1	3234.4	2937.9	2695.3	2268.1	2249.3	2266.9	2253.0	2101.0
45°	3838.8	3807.4	3730.8	3662.9	3518.4	3396.5	2761.9	2635.0	2646.3	2598.6	2396.3
47.5°	3895.4	3860.2	3843.8	3938.1	4041.1	4071.3	3368.9	3093.7	3082.4	2976.8	2702.9
50°	3649.1	3652.8	3713.2	3982.1	4411.8	4683.2	4072.5	3611.4	3569.9	3334.9	2988.1
52.5°	3117.5	3177.9	3329.9	3765.9	4524.9	5128.1	4776.2	4160.5	4096.4	3683.0	3201.7
55°	2439.0	2516.9	2767.0	3268.3	4288.7	5326.6	5369.3	4731.0	4585.2	3944.4	3367.6
57.5°	1813.2	1837.1	2128.6	2586.0	3729.5	5131.8	5673.4	5170.8	4983.6	4153.0	3532.2
60°	1129.7	1144.7	1452.6	1969.0	2824.8	4411.8	5673.4	5473.6	5295.2	4340.2	3683.0
62.5°	702.4	707.4	823.1	1349.6	1920.0	3272.1	5438.4	5708.6	5565.3	4474.6	3812.4
65°	404.6	409.6	463.7	762.7	1249.0	1959.0	4837.8	5777.7	5713.6	4581.5	3913.0
67.5°	295.3	297.8	319.2	428.5	816.8	1006.5	3634.0	5500.0	5580.4	4634.2	3910.4
70°	256.3	260.1	287.8	334.2	589.3	618.2	1849.7	4749.8	4974.8	4558.8	3793.6
72.5°	197.3	202.3	243.8	314.1	432.3	444.8	669.8	3380.2	3720.7	4087.6	3473.2
75°	135.7	140.7	182.2	258.9	356.9	333.0	368.2	1555.6	1962.8	2741.8	2643.8
77.5°	86.7	88.0	114.3	188.5	307.9	236.2	252.6	507.7	712.5	1240.2	1247.8
80°	57.8	59.1	70.4	121.9	211.1	218.6	155.8	235.0	257.6	361.9	251.3
82.5°	35.2	35.2	47.7	76.7	128.2	180.9	101.8	123.1	131.9	139.5	65.3
85°	13.8	13.8	28.9	50.3	80.4	84.2	64.1	71.6	75.4	81.7	30.2
87.5°	3.8	3.8	16.3	27.6	35.2	39.0	39.0	35.2	37.7	46.5	15.1
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°	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4	1025.4
2.5°	1020.3	1016.6	1011.5	1006.5	1001.5	997.7	993.9	993.9	991.4	987.7	985.2
5°	1017.8	1011.5	1000.2	991.4	977.6	967.6	960.0	953.7	950.0	941.2	939.9
7.5°	1014.1	1006.5	990.2	972.6	950.0	932.4	914.8	902.2	889.7	879.6	877.1
10°	1007.8	999.0	975.1	950.0	918.6	885.9	844.4	796.7	752.7	727.6	720.0
12.5°	1007.8	996.5	965.0	931.1	885.9	805.5	699.9	594.4	512.7	476.2	466.2
15°	1014.1	999.0	957.5	911.0	826.8	663.5	492.6	353.1	263.9	236.2	230.0
17.5°	1020.3	999.0	946.2	883.4	718.8	481.3	280.2	186.0	157.1	150.8	150.8
20°	1022.8	996.5	931.1	831.8	574.3	299.1	167.1	139.5	128.2	124.4	124.4
22.5°	1032.9	997.7	919.8	757.7	417.2	175.9	131.9	116.9	105.6	101.8	101.8
25°	1058.0	1012.8	922.3	663.5	267.6	133.2	111.8	96.8	85.4	80.4	80.4
27.5°	1098.2	1046.7	936.1	554.1	168.4	114.3	94.2	77.9	69.1	64.1	64.1
30°	1143.5	1084.4	942.4	428.5	125.7	96.8	76.7	61.6	55.3	51.5	50.3
32.5°	1222.6	1149.8	937.4	294.0	103.0	81.7	61.6	49.0	44.0	42.7	42.7
35°	1349.6	1264.1	927.3	184.7	85.4	65.3	49.0	40.2	36.4	35.2	33.9
37.5°	1521.7	1431.2	897.2	121.9	70.4	51.5	40.2	33.9	30.2	28.9	28.9
40°	1731.6	1622.2	839.4	93.0	60.3	41.5	33.9	28.9	26.4	25.1	25.1
42.5°	1971.6	1834.6	747.7	80.4	50.3	35.2	28.9	23.9	22.6	21.4	21.4
45°	2234.2	2057.0	620.7	71.6	42.7	28.9	23.9	21.4	18.8	18.8	17.6
47.5°	2513.1	2280.7	477.5	62.8	36.4	25.1	21.4	17.6	16.3	15.1	15.1
50°	2782.0	2480.5	335.5	54.0	30.2	21.4	17.6	15.1	13.8	12.6	12.6
52.5°	2971.8	2601.1	237.5	46.5	25.1	18.8	13.8	11.3	10.1	10.1	10.1
55°	3123.8	2676.5	165.9	39.0	21.4	16.3	11.3	8.8	8.8	7.5	7.5
57.5°	3267.1	2725.5	121.9	32.7	17.6	12.6	8.8	6.3	6.3	5.0	5.0
60°	3415.4	2751.9	93.0	26.4	15.1	10.1	6.3	5.0	3.8	3.8	3.8
62.5°	3564.9	2768.2	71.6	21.4	12.6	7.5	5.0	3.8	2.5	1.3	1.3
65°	3695.6	2773.2	55.3	16.3	10.1	5.0	3.8	1.3	0.0	0.0	0.0
67.5°	3734.5	2715.4	42.7	12.6	7.5	3.8	2.5	0.0	0.0	0.0	0.0
70°	3629.0	2562.1	32.7	10.1	6.3	2.5	1.3	0.0	0.0	0.0	0.0
72.5°	3220.6	2148.7	25.1	6.3	5.0	2.5	1.3	0.0	0.0	0.0	0.0
75°	2304.5	1146.0	17.6	5.0	3.8	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	1060.5	443.6	12.6	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0
80°	207.3	110.6	5.0	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	47.7	18.8	2.5	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.3	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)