

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: P397556

Luminaire Tested: **ARCH-S-PA1-100-740-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397556
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-PA1-100-740-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 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: 8041 lumens
Efficiency: N/A
Efficacy: 83.8 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): 96
Input Voltage (V): NR
Input Current (A_{in}): 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

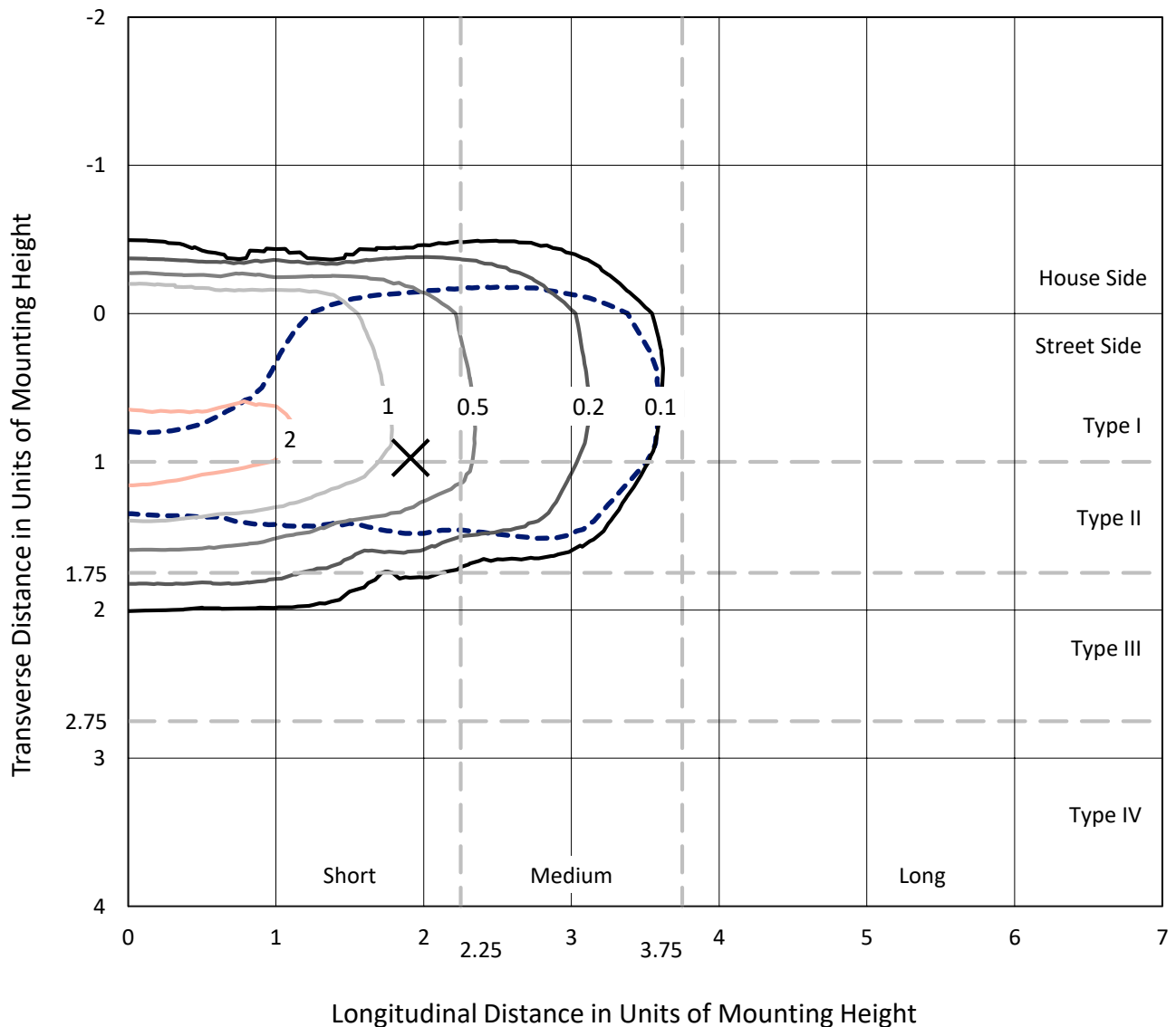


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

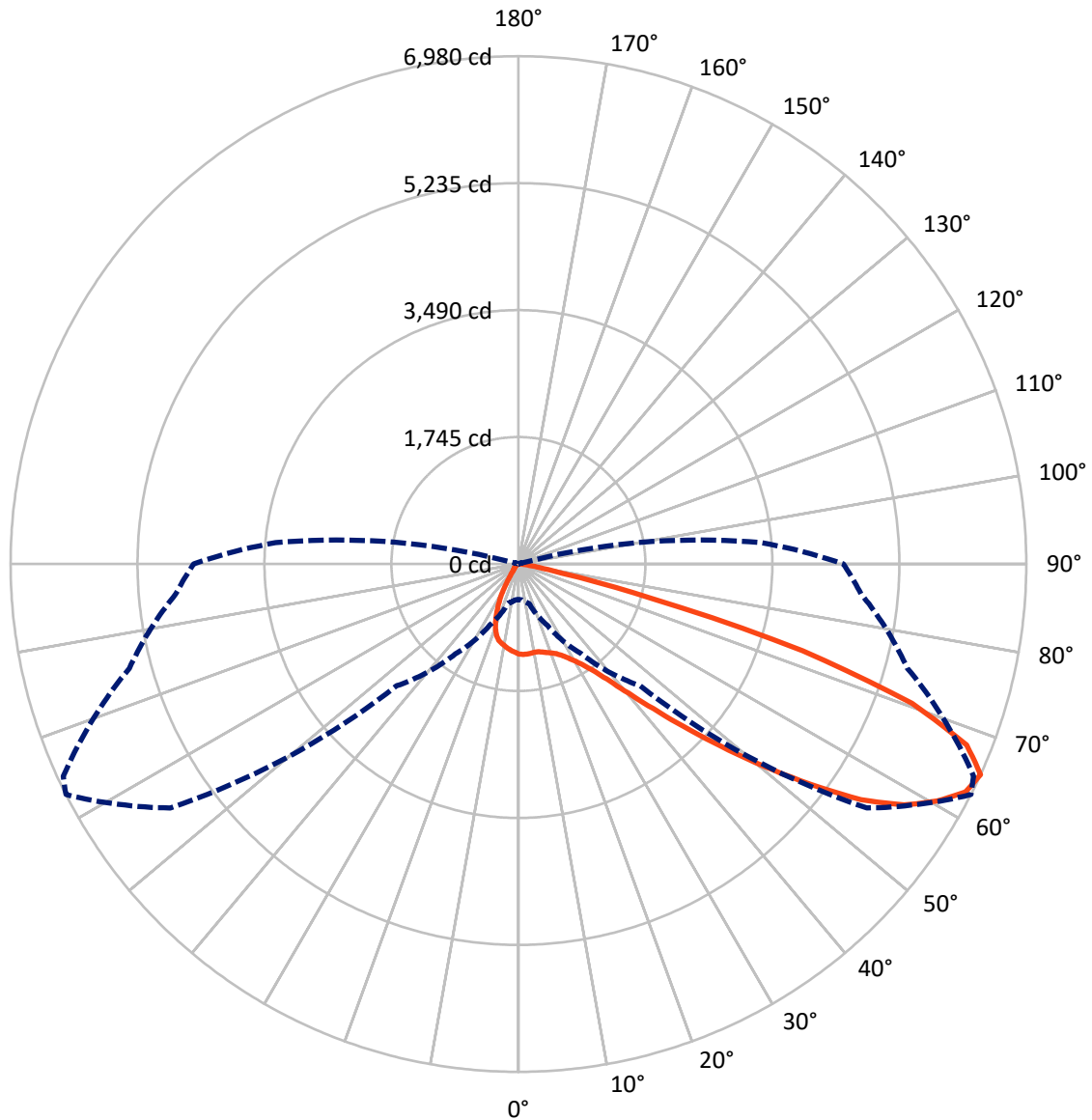


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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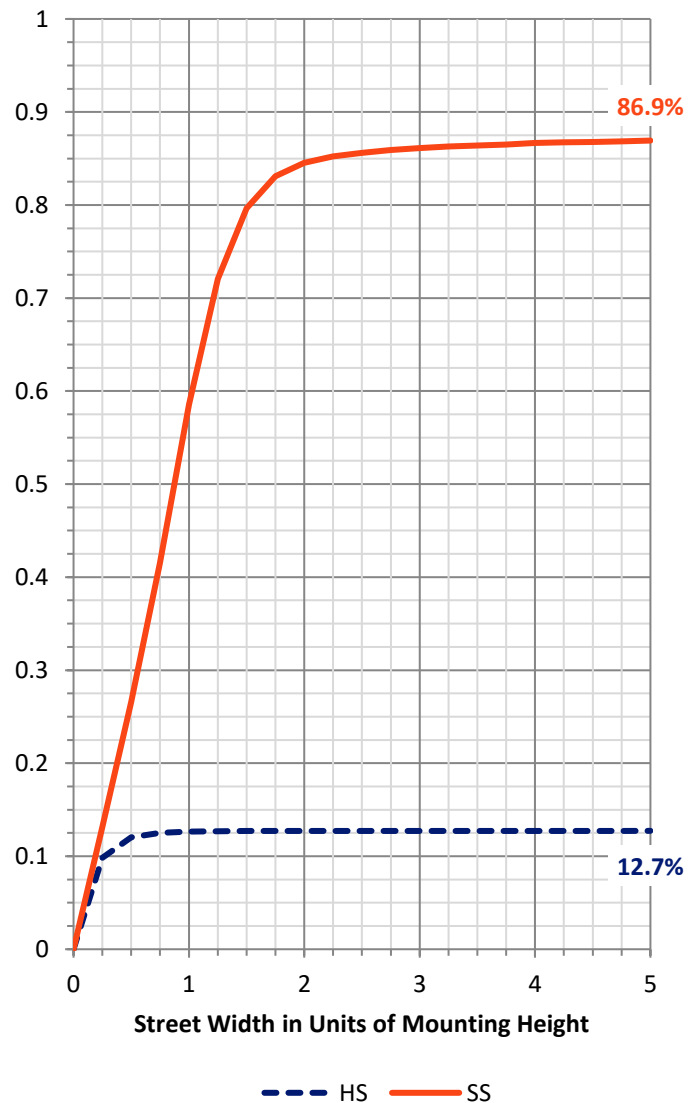
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1034.9	0.0	1034.9
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	7006.1	0.0	7006.1
	% Fixture	87.1	0.0	87.1
Total	Lumens	8041.0	0.0	8041.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.0	1.4
10°-20°	278.8	3.5
20°-30°	413.3	5.1
30°-40°	767.4	9.5
40°-50°	1625.6	20.2
50°-60°	2247.8	28.0
60°-70°	1799.4	22.4
70°-80°	747.6	9.3
80°-90°	48.0	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°	8041.0	100.0
0°-180°	8041.0	100.0

Coefficient of Utilization



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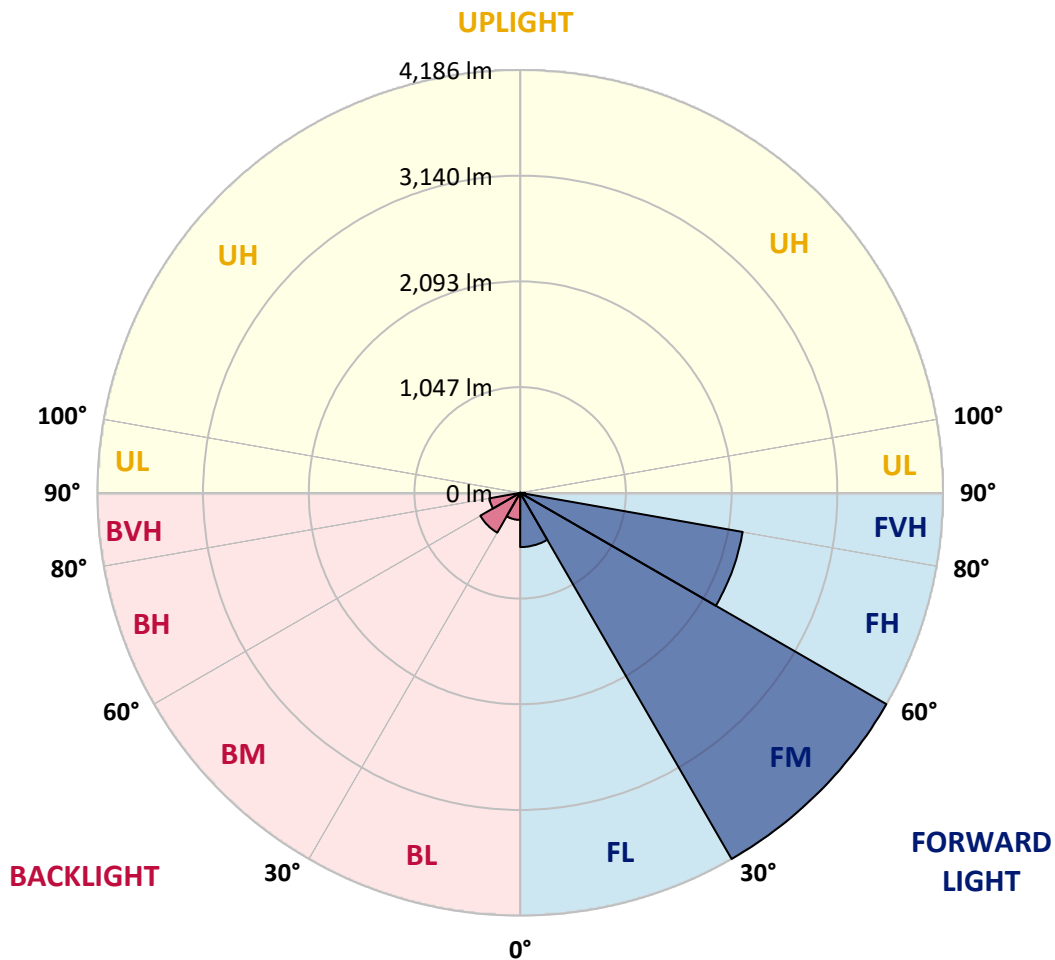
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	537.0	6.7			
FM	(30°-60°)	4186.2	52.1			
FH	(60°-80°)	2237.2	27.8			G2/5000
FVH	(80°-90°)	45.8	0.6			G1/100
BL	(0°-30°)	268.2	3.3	B1/500		
BM	(30°-60°)	454.6	5.7	B1/1000		
BH	(60°-80°)	309.9	3.9	B1/500		G1/500
BVH	(80°-90°)	2.2	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°	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7
2.5°	1260.0	1256.9	1253.9	1252.4	1252.4	1250.9	1244.8	1243.3	1240.2	1237.2	1234.2
5°	1247.8	1243.3	1241.8	1243.3	1244.8	1247.8	1244.8	1244.8	1241.8	1238.7	1232.6
7.5°	1217.5	1214.4	1215.9	1220.5	1222.0	1232.6	1234.2	1238.7	1238.7	1235.7	1231.1
10°	1181.0	1179.5	1179.5	1187.1	1194.7	1209.9	1220.5	1232.6	1234.2	1234.2	1226.6
12.5°	1153.7	1152.2	1156.7	1165.9	1181.0	1200.8	1219.0	1237.2	1240.2	1241.8	1229.6
15°	1137.0	1137.0	1143.1	1161.3	1182.6	1209.9	1231.1	1255.4	1258.5	1256.9	1240.2
17.5°	1121.8	1123.3	1135.5	1165.9	1190.1	1226.6	1252.4	1279.7	1281.2	1279.7	1252.4
20°	1115.8	1118.8	1137.0	1176.5	1203.8	1244.8	1278.2	1305.5	1307.0	1301.0	1264.5
22.5°	1132.5	1134.0	1156.7	1199.3	1225.1	1270.6	1313.1	1338.9	1340.4	1331.3	1282.7
25°	1190.1	1190.1	1209.9	1246.3	1269.1	1314.6	1360.2	1390.5	1390.5	1379.9	1323.7
27.5°	1325.2	1313.1	1308.6	1319.2	1326.8	1375.3	1423.9	1461.9	1460.4	1445.2	1376.9
30°	1586.4	1556.0	1507.4	1452.8	1425.4	1458.8	1504.4	1553.0	1551.4	1527.1	1442.1
32.5°	2025.1	1981.0	1865.7	1721.5	1604.6	1566.6	1609.1	1662.3	1663.8	1634.9	1546.9
35°	2639.9	2570.0	2363.6	2163.2	1896.0	1751.8	1764.0	1821.6	1839.9	1824.7	1723.0
37.5°	3231.9	3168.1	2970.8	2693.0	2330.2	2035.7	1984.1	2034.2	2055.4	2055.4	1947.6
40°	3828.5	3754.1	3579.5	3300.2	2917.7	2479.0	2293.8	2334.7	2357.5	2362.1	2220.9
42.5°	4306.7	4258.1	4124.5	3907.4	3549.2	3256.2	2740.1	2717.3	2738.5	2721.8	2538.2
45°	4637.6	4599.7	4507.1	4425.1	4250.5	4103.3	3336.7	3183.3	3197.0	3139.3	2894.9
47.5°	4705.9	4663.4	4643.7	4757.5	4882.0	4918.4	4069.9	3737.4	3723.8	3596.2	3265.3
50°	4408.4	4412.9	4485.8	4810.7	5329.8	5657.7	4920.0	4362.8	4312.8	4028.9	3609.9
52.5°	3766.3	3839.1	4022.8	4549.6	5466.5	6195.1	5770.1	5026.2	4948.8	4449.4	3868.0
55°	2946.5	3040.6	3342.7	3948.4	5181.1	6435.0	6486.6	5715.4	5539.3	4765.1	4068.3
57.5°	2190.5	2219.4	2571.6	3124.1	4505.5	6199.7	6853.9	6246.7	6020.5	5017.1	4267.2
60°	1364.7	1382.9	1754.9	2378.8	3412.6	5329.8	6853.9	6612.6	6397.0	5243.3	4449.4
62.5°	848.6	854.7	994.3	1630.4	2319.6	3953.0	6570.1	6896.5	6723.4	5405.7	4605.7
65°	488.8	494.9	560.2	921.5	1508.9	2366.6	5844.5	6979.9	6902.5	5534.8	4727.2
67.5°	356.7	359.8	385.6	517.7	986.7	1215.9	4390.2	6644.5	6741.6	5598.5	4724.1
70°	309.7	314.2	347.6	403.8	712.0	746.9	2234.6	5738.2	6009.9	5507.4	4583.0
72.5°	238.3	244.4	294.5	379.5	522.2	537.4	809.1	4083.5	4494.9	4938.2	4195.9
75°	163.9	170.0	220.1	312.7	431.1	402.3	444.8	1879.3	2371.2	3312.4	3194.0
77.5°	104.7	106.3	138.1	227.7	371.9	285.4	305.1	613.3	860.7	1498.3	1507.4
80°	69.8	71.3	85.0	147.2	255.0	264.1	188.2	283.9	311.2	437.2	303.6
82.5°	42.5	42.5	57.7	92.6	154.8	218.6	123.0	148.8	159.4	168.5	78.9
85°	16.7	16.7	34.9	60.7	97.2	101.7	77.4	86.5	91.1	98.7	36.4
87.5°	4.6	4.6	19.7	33.4	42.5	47.1	47.1	42.5	45.5	56.2	18.2
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°	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7	1238.7
2.5°	1232.6	1228.1	1222.0	1215.9	1209.9	1205.3	1200.8	1200.8	1197.7	1193.2	1190.1
5°	1229.6	1222.0	1208.4	1197.7	1181.0	1168.9	1159.8	1152.2	1147.6	1137.0	1135.5
7.5°	1225.1	1215.9	1196.2	1175.0	1147.6	1126.4	1105.1	1090.0	1074.8	1062.6	1059.6
10°	1217.5	1206.8	1178.0	1147.6	1109.7	1070.2	1020.1	962.4	909.3	878.9	869.8
12.5°	1217.5	1203.8	1165.9	1124.9	1070.2	973.1	845.5	718.0	619.4	575.3	563.2
15°	1225.1	1206.8	1156.7	1100.6	998.9	801.5	595.1	426.6	318.8	285.4	277.8
17.5°	1232.6	1206.8	1143.1	1067.2	868.3	581.4	338.5	224.7	189.8	182.2	182.2
20°	1235.7	1203.8	1124.9	1004.9	693.7	361.3	201.9	168.5	154.8	150.3	150.3
22.5°	1247.8	1205.3	1111.2	915.4	504.0	212.5	159.4	141.2	127.5	123.0	123.0
25°	1278.2	1223.5	1114.2	801.5	323.3	160.9	135.1	116.9	103.2	97.2	97.2
27.5°	1326.8	1264.5	1130.9	669.5	203.4	138.1	113.9	94.1	83.5	77.4	77.4
30°	1381.4	1310.1	1138.5	517.7	151.8	116.9	92.6	74.4	66.8	62.2	60.7
32.5°	1477.1	1389.0	1132.5	355.2	124.5	98.7	74.4	59.2	53.1	51.6	51.6
35°	1630.4	1527.1	1120.3	223.2	103.2	78.9	59.2	48.6	44.0	42.5	41.0
37.5°	1838.3	1729.0	1083.9	147.2	85.0	62.2	48.6	41.0	36.4	34.9	34.9
40°	2091.9	1959.8	1014.1	112.3	72.9	50.1	41.0	34.9	31.9	30.4	30.4
42.5°	2381.8	2216.3	903.2	97.2	60.7	42.5	34.9	28.8	27.3	25.8	25.8
45°	2699.1	2485.0	749.9	86.5	51.6	34.9	28.8	25.8	22.8	22.8	21.3
47.5°	3036.1	2755.2	576.9	75.9	44.0	30.4	25.8	21.3	19.7	18.2	18.2
50°	3360.9	2996.6	405.3	65.3	36.4	25.8	21.3	18.2	16.7	15.2	15.2
52.5°	3590.2	3142.3	286.9	56.2	30.4	22.8	16.7	13.7	12.1	12.1	12.1
55°	3773.8	3233.4	200.4	47.1	25.8	19.7	13.7	10.6	10.6	9.1	9.1
57.5°	3946.9	3292.6	147.2	39.5	21.3	15.2	10.6	7.6	7.6	6.1	6.1
60°	4126.0	3324.5	112.3	31.9	18.2	12.1	7.6	6.1	4.6	4.6	4.6
62.5°	4306.7	3344.2	86.5	25.8	15.2	9.1	6.1	4.6	3.0	1.5	1.5
65°	4464.6	3350.3	66.8	19.7	12.1	6.1	4.6	1.5	0.0	0.0	0.0
67.5°	4511.6	3280.5	51.6	15.2	9.1	4.6	3.0	0.0	0.0	0.0	0.0
70°	4384.1	3095.3	39.5	12.1	7.6	3.0	1.5	0.0	0.0	0.0	0.0
72.5°	3890.7	2595.8	30.4	7.6	6.1	3.0	1.5	0.0	0.0	0.0	0.0
75°	2784.1	1384.5	21.3	6.1	4.6	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	1281.2	535.9	15.2	4.6	3.0	1.5	0.0	0.0	0.0	0.0	0.0
80°	250.5	133.6	6.1	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.7	22.8	3.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.7	7.6	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.6	3.0	1.5	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)