

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: P572785

Luminaire Tested: **ARCH-S-PA2-110-827-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572785
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-110-827-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 1105mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8103 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

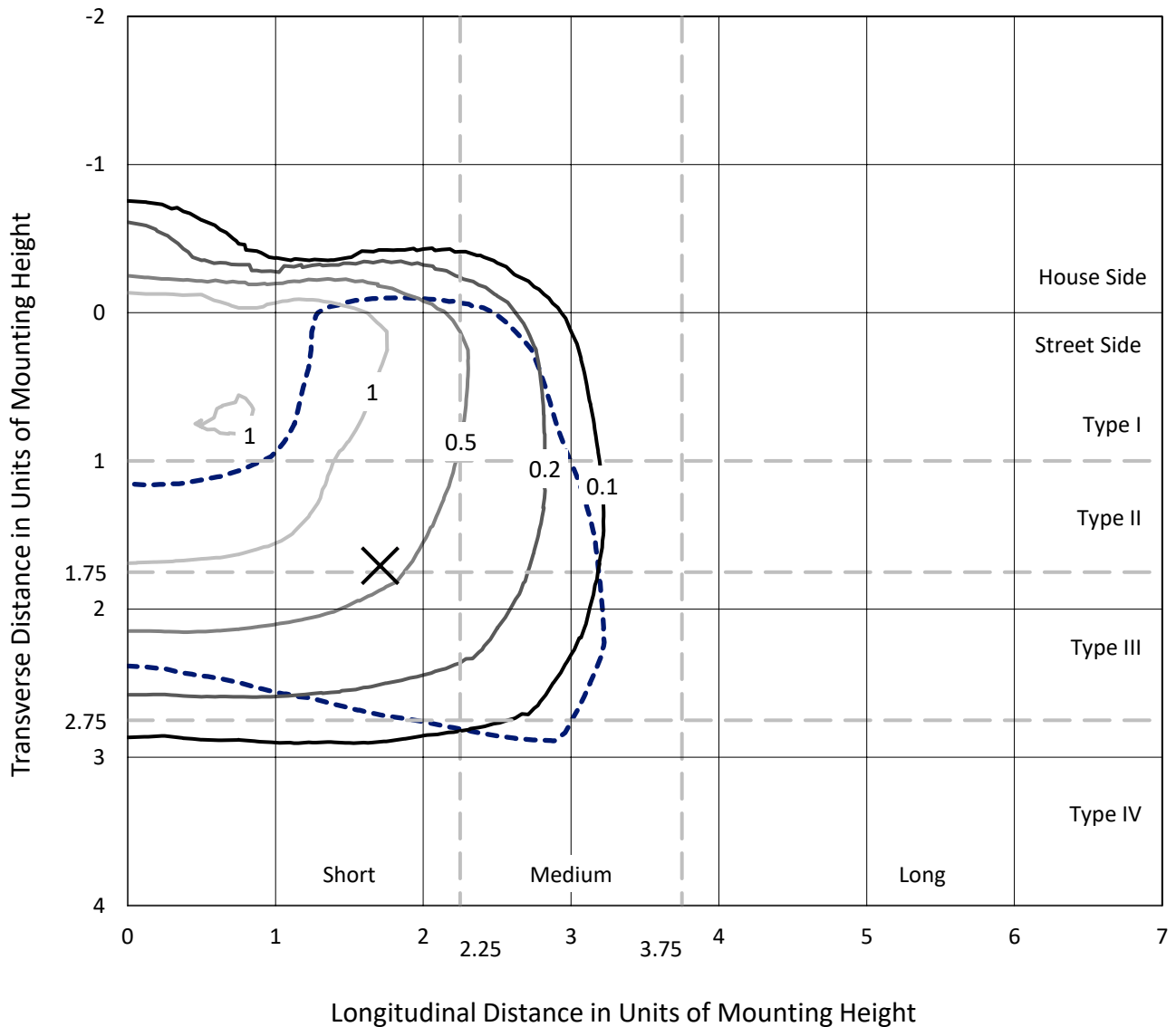
Input Watts (W): 114.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

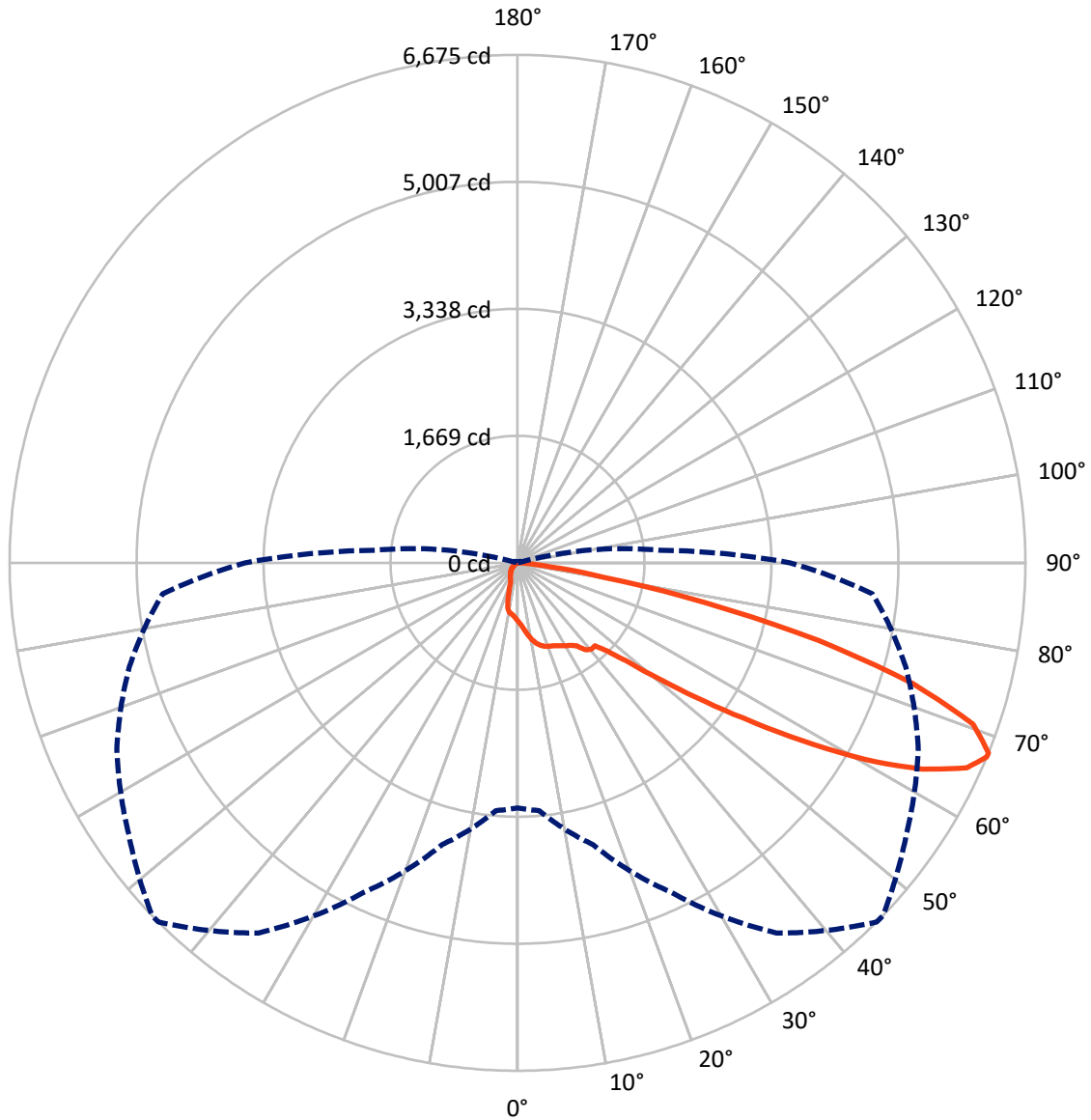
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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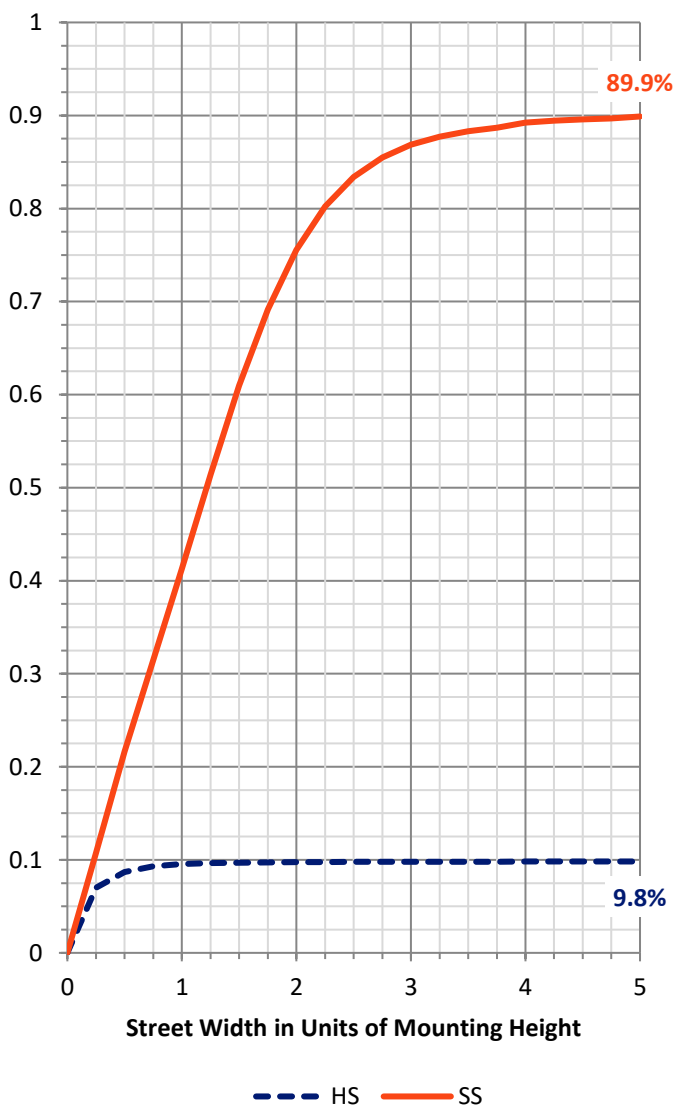
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	802.9	0.0	802.9
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	7300.1	0.0	7300.1
	% Fixture	90.1	0.0	90.1
Total	Lumens	8103.0	0.0	8103.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	0.9
10°-20°	232.5	2.9
20°-30°	371.9	4.6
30°-40°	535.3	6.6
40°-50°	939.1	11.6
50°-60°	1978.7	24.4
60°-70°	2736.3	33.8
70°-80°	1145.5	14.1
80°-90°	86.6	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°	8103.0	100.0
0°-180°	8103.0	100.0

Coefficient of Utilization



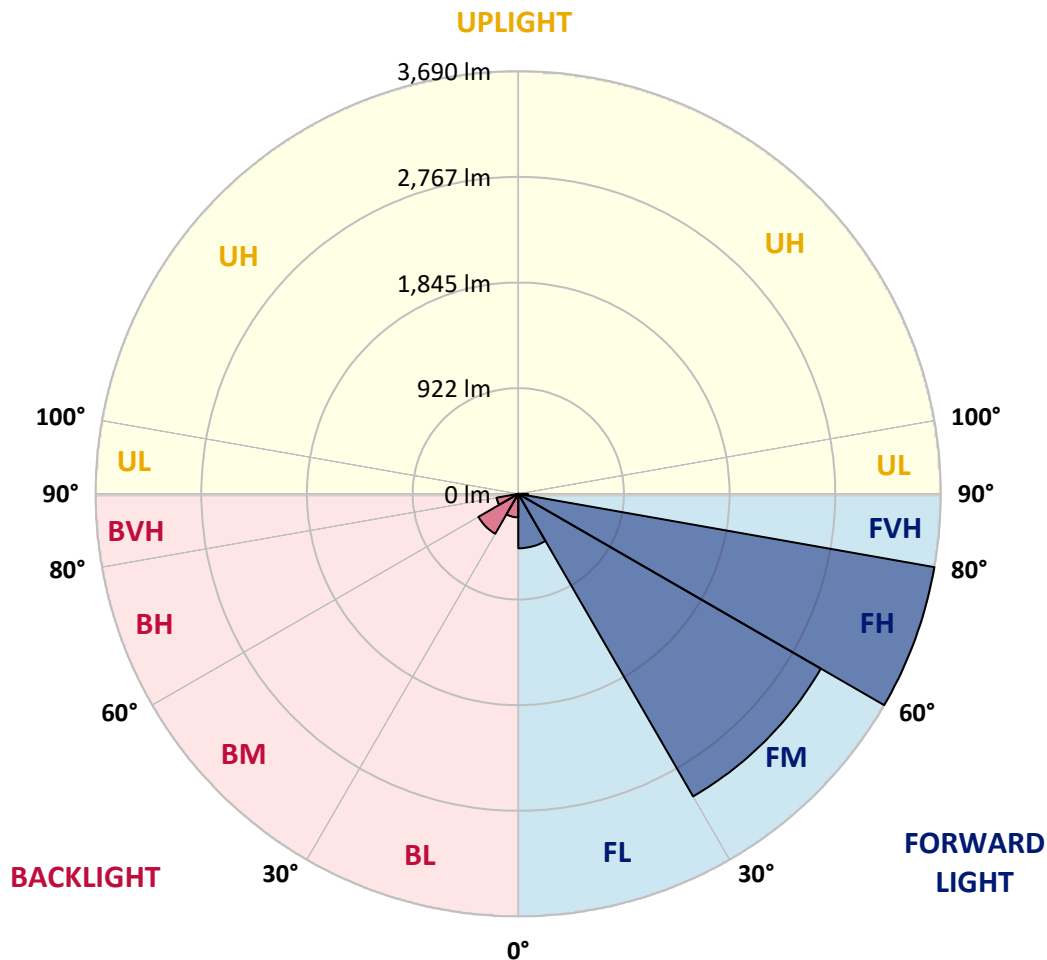
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	475.6	5.9			
FM (30°-60°)	3050.9	37.7			
FH (60°-80°)	3689.9	45.5			G2/5000
FVH (80°-90°)	83.7	1.0			G1/100
BL (0°-30°)	205.8	2.5	B1/500		
BM (30°-60°)	402.3	5.0	B1/1000		
BH (60°-80°)	191.9	2.4	B1/500		G1/500
BVH (80°-90°)	2.9	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3
2.5°	853.1	838.2	835.2	832.2	823.2	811.2	814.2	805.2	790.3	781.3	772.3
5°	957.9	942.9	937.0	919.0	901.0	874.1	874.1	850.1	823.2	799.3	775.3
7.5°	1065.7	1053.7	1041.7	1014.8	987.8	951.9	948.9	913.0	871.1	835.2	796.3
10°	1155.5	1146.5	1131.5	1098.6	1062.7	1023.8	1014.8	981.9	928.0	880.1	829.2
12.5°	1227.3	1218.3	1197.4	1164.5	1119.6	1080.6	1077.6	1035.7	981.9	931.0	868.1
15°	1281.2	1266.2	1242.3	1206.4	1161.5	1125.5	1119.6	1083.6	1032.7	975.9	901.0
17.5°	1290.2	1281.2	1260.2	1221.3	1182.4	1152.5	1149.5	1122.5	1077.6	1017.8	939.9
20°	1266.2	1263.2	1245.3	1215.3	1185.4	1170.4	1167.4	1149.5	1113.6	1059.7	981.9
22.5°	1230.3	1227.3	1215.3	1200.4	1188.4	1185.4	1185.4	1179.4	1158.5	1107.6	1035.7
25°	1206.4	1203.4	1197.4	1188.4	1188.4	1206.4	1209.4	1215.3	1197.4	1158.5	1080.6
27.5°	1209.4	1203.4	1197.4	1188.4	1200.4	1233.3	1236.3	1251.3	1236.3	1200.4	1131.5
30°	1251.3	1242.3	1224.3	1203.4	1218.3	1263.2	1266.2	1284.2	1272.2	1254.3	1188.4
32.5°	1317.1	1311.1	1275.2	1239.3	1248.3	1293.2	1299.2	1332.1	1347.1	1320.1	1239.3
35°	1412.9	1392.0	1347.1	1311.1	1305.1	1338.1	1347.1	1400.9	1439.9	1374.0	1269.2
37.5°	1490.7	1472.8	1400.9	1344.1	1377.0	1451.8	1454.8	1520.7	1487.7	1380.0	1317.1
40°	1754.2	1751.2	1625.4	1445.8	1409.9	1493.7	1505.7	1517.7	1502.7	1448.8	1421.9
42.5°	2179.2	2143.3	2002.6	1727.2	1481.8	1490.7	1496.7	1559.6	1637.4	1613.5	1622.5
45°	2640.2	2610.3	2451.6	2104.4	1727.2	1652.4	1658.4	1760.2	1909.8	1939.8	1987.7
47.5°	3065.3	3017.4	2927.6	2577.4	2146.3	1927.8	1939.8	2062.5	2311.0	2376.8	2451.6
50°	3424.5	3391.6	3307.8	3077.3	2661.2	2361.8	2373.8	2475.6	2798.9	2903.7	2999.4
52.5°	3945.4	3900.5	3738.8	3631.1	3316.8	2927.6	2900.7	3008.4	3379.6	3448.5	3577.2
55°	4424.3	4331.5	4235.7	4190.8	4059.1	3604.1	3595.1	3616.1	3924.4	3960.3	4190.8
57.5°	4627.9	4609.9	4690.8	4840.4	4870.4	4400.4	4361.5	4280.6	4523.1	4520.1	4789.5
60°	4756.6	4756.6	4972.1	5343.3	5582.8	5250.5	5196.6	4945.2	5032.0	5035.0	5283.5
62.5°	4675.8	4696.7	5032.0	5591.8	6073.7	5972.0	5936.0	5514.0	5508.0	5439.1	5525.9
65°	4175.9	4211.8	4750.6	5454.1	6253.3	6492.8	6477.8	5998.9	5825.3	5573.8	5379.2
67°	3406.6	3472.4	4125.0	4957.2	6049.8	6672.4	6675.4	6208.4	5828.3	5349.3	4861.4
67.5°	3221.0	3268.9	3834.6	4777.6	5939.0	6675.4	6675.4	6235.4	5810.3	5280.5	4681.8
70°	2053.5	2065.5	2682.1	3696.9	5073.9	6352.1	6376.1	6031.8	5292.4	4274.7	3286.8
72.5°	1014.8	987.8	1415.9	2379.8	3807.7	5436.1	5499.0	5151.7	4187.9	2792.9	1736.2
75°	398.1	425.1	616.7	1266.2	2385.8	4098.0	4145.9	3747.8	2694.1	1439.9	685.5
77.5°	176.6	176.6	263.4	568.8	1254.3	2514.5	2538.5	2287.0	1421.9	592.7	209.5
80°	95.8	101.8	137.7	248.5	631.6	1155.5	1260.2	1134.5	643.6	260.4	71.8
82.5°	47.9	50.9	83.8	140.7	317.3	437.0	461.0	481.9	296.4	161.6	29.9
85°	18.0	21.0	44.9	80.8	143.7	146.7	146.7	188.6	161.6	122.7	15.0
87.5°	3.0	6.0	21.0	32.9	56.9	50.9	44.9	59.9	89.8	77.8	9.0
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°	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3	766.3
2.5°	766.3	760.3	748.4	739.4	733.4	727.4	721.4	721.4	718.4	718.4	721.4
5°	766.3	754.4	730.4	715.4	703.5	694.5	688.5	688.5	685.5	688.5	691.5
7.5°	781.3	763.3	730.4	703.5	688.5	673.5	667.5	664.5	664.5	667.5	664.5
10°	805.2	781.3	739.4	703.5	682.5	661.6	628.6	598.7	571.8	559.8	556.8
12.5°	835.2	805.2	754.4	712.4	679.5	607.7	517.9	461.0	425.1	407.1	401.1
15°	868.1	832.2	772.3	724.4	634.6	499.9	383.2	320.3	299.3	302.3	305.3
17.5°	904.0	865.1	799.3	718.4	544.8	371.2	281.4	266.4	275.4	284.4	284.4
20°	939.9	898.0	826.2	673.5	428.1	275.4	251.5	254.4	263.4	272.4	272.4
22.5°	987.8	942.9	853.1	595.7	317.3	239.5	239.5	245.5	251.5	260.4	260.4
25°	1038.7	993.8	871.1	499.9	236.5	224.5	227.5	233.5	239.5	248.5	248.5
27.5°	1092.6	1047.7	868.1	386.2	206.5	206.5	209.5	218.5	224.5	233.5	233.5
30°	1152.5	1113.6	835.2	281.4	191.6	188.6	188.6	197.6	206.5	212.5	215.5
32.5°	1203.4	1170.4	778.3	212.5	179.6	173.6	170.6	173.6	182.6	188.6	191.6
35°	1245.3	1233.3	694.5	182.6	167.6	158.7	152.7	149.7	152.7	152.7	155.7
37.5°	1323.1	1326.1	595.7	170.6	158.7	146.7	134.7	125.7	119.7	116.7	113.8
40°	1469.8	1466.8	490.9	161.6	149.7	134.7	116.7	104.8	89.8	83.8	83.8
42.5°	1676.3	1631.4	374.2	152.7	140.7	122.7	98.8	80.8	65.9	62.9	62.9
45°	2047.5	1861.9	281.4	146.7	131.7	107.8	80.8	59.9	50.9	47.9	47.9
47.5°	2457.6	2128.3	224.5	137.7	122.7	95.8	62.9	47.9	38.9	38.9	38.9
50°	2909.6	2382.8	188.6	128.7	107.8	80.8	50.9	38.9	35.9	32.9	35.9
52.5°	3403.6	2583.4	164.6	116.7	92.8	65.9	41.9	35.9	29.9	29.9	29.9
55°	3846.6	2718.1	137.7	101.8	77.8	53.9	38.9	29.9	26.9	23.9	21.0
57.5°	4247.7	2789.9	110.8	86.8	59.9	44.9	32.9	23.9	21.0	15.0	15.0
60°	4454.3	2724.0	86.8	68.8	47.9	35.9	26.9	21.0	15.0	9.0	9.0
62.5°	4487.2	2553.4	68.8	53.9	41.9	29.9	21.0	15.0	9.0	6.0	6.0
65°	4199.8	2254.1	56.9	44.9	32.9	23.9	18.0	12.0	6.0	3.0	3.0
67°	3684.9	1939.8	50.9	38.9	29.9	21.0	15.0	9.0	6.0	3.0	0.0
67.5°	3583.2	1882.9	47.9	38.9	29.9	21.0	15.0	9.0	6.0	3.0	0.0
70°	2352.9	1302.2	44.9	35.9	26.9	18.0	12.0	9.0	3.0	0.0	0.0
72.5°	1284.2	655.6	41.9	32.9	23.9	18.0	12.0	6.0	3.0	0.0	0.0
75°	470.0	248.5	35.9	29.9	21.0	18.0	12.0	6.0	3.0	0.0	0.0
77.5°	158.7	86.8	32.9	29.9	23.9	18.0	12.0	6.0	3.0	0.0	0.0
80°	53.9	38.9	26.9	23.9	18.0	15.0	12.0	6.0	3.0	0.0	0.0
82.5°	21.0	12.0	9.0	9.0	9.0	12.0	12.0	9.0	3.0	0.0	0.0
85°	9.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0
87.5°	9.0	6.0	3.0	3.0	3.0	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)