

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: P573518

Luminaire Tested: **ARCH-S-PA2-80-830-U-T2R**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573518
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-80-830-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9436 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

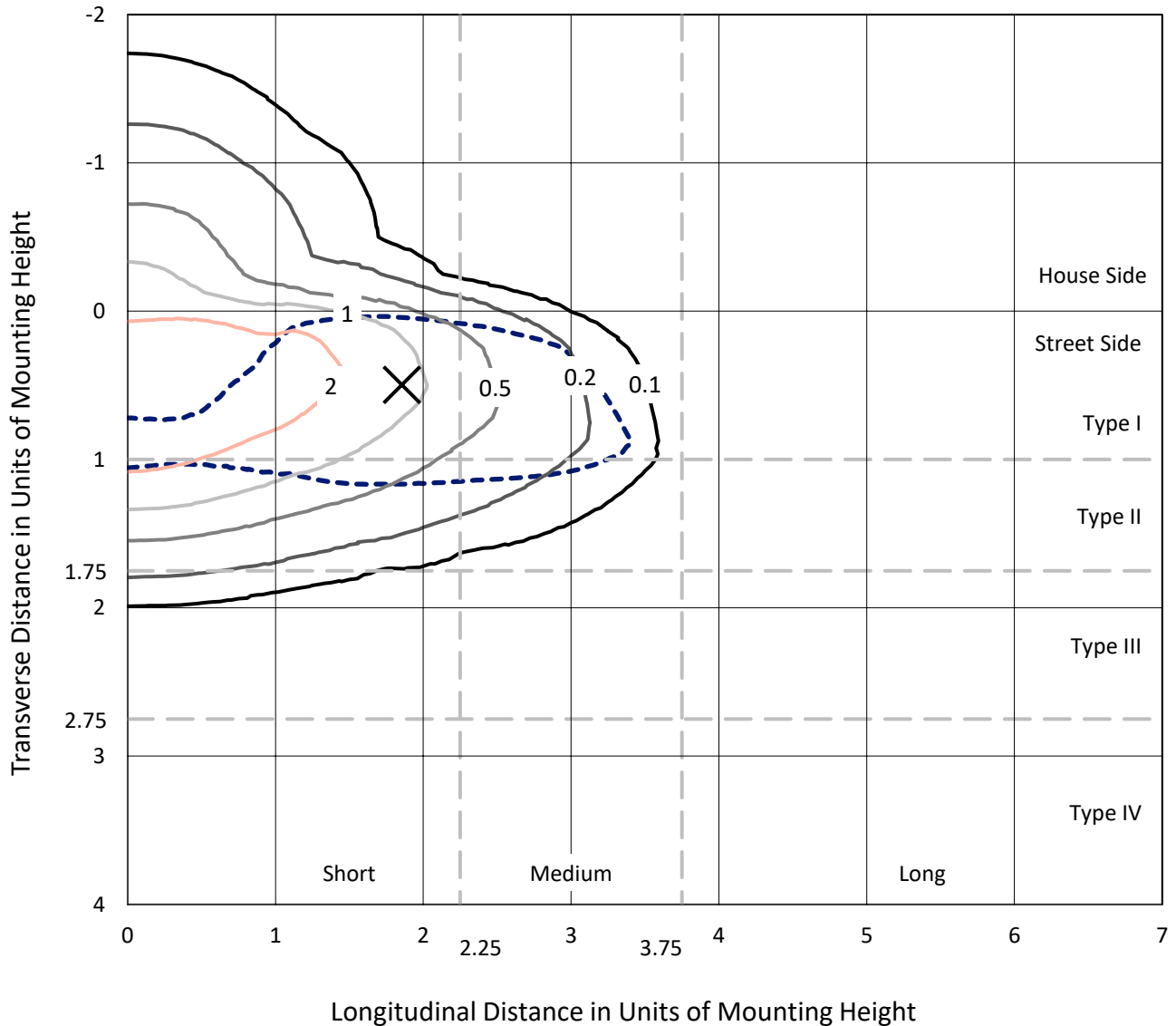
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P573518
 CATALOG NUMBER: ARCH-S-PA2-80-830-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

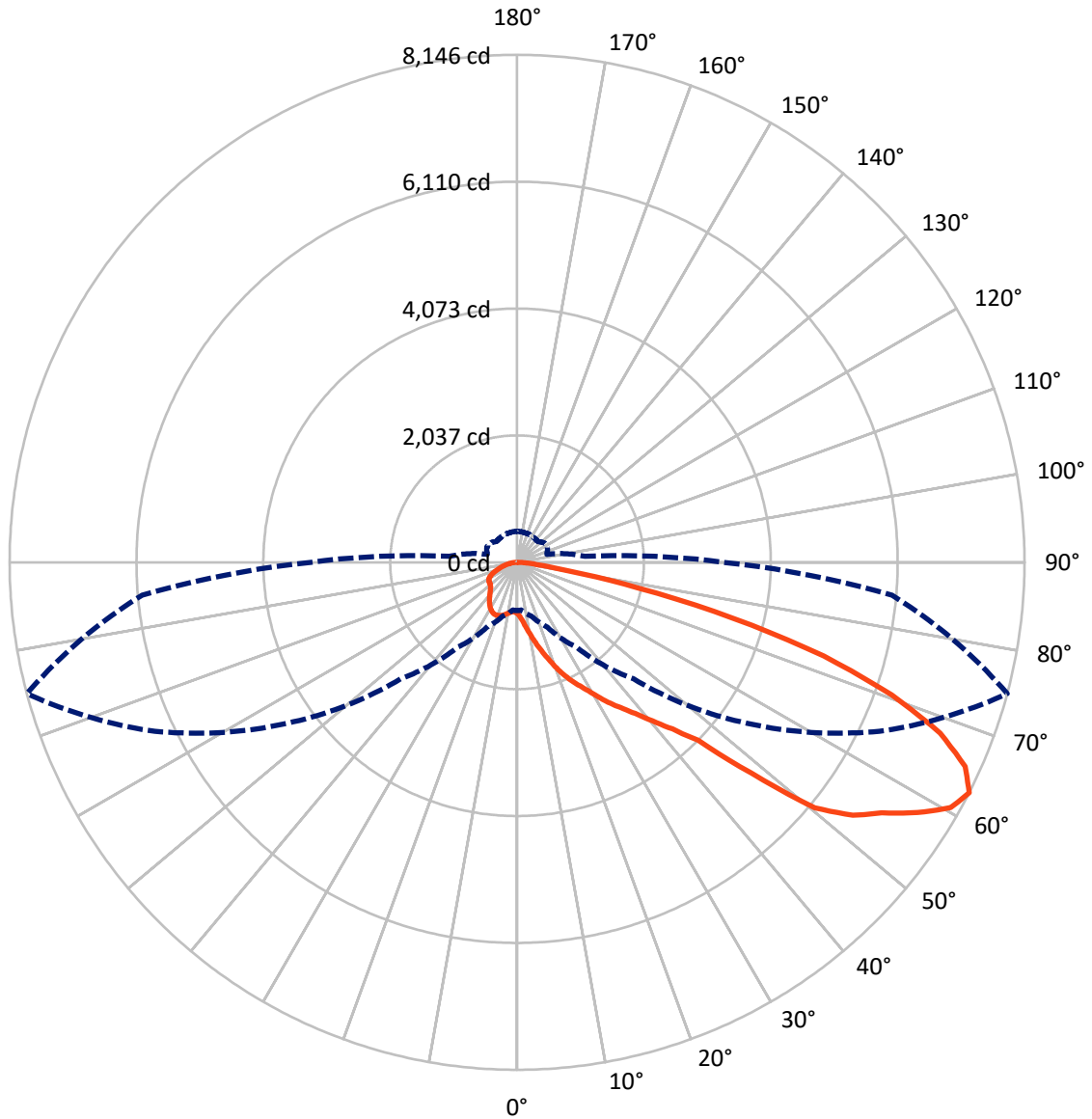
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type II - Short - N/A

REPORT NUMBER: P573518
CATALOG NUMBER: ARCH-S-PA2-80-830-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P573518
 CATALOG NUMBER: ARCH-S-PA2-80-830-U-T2R

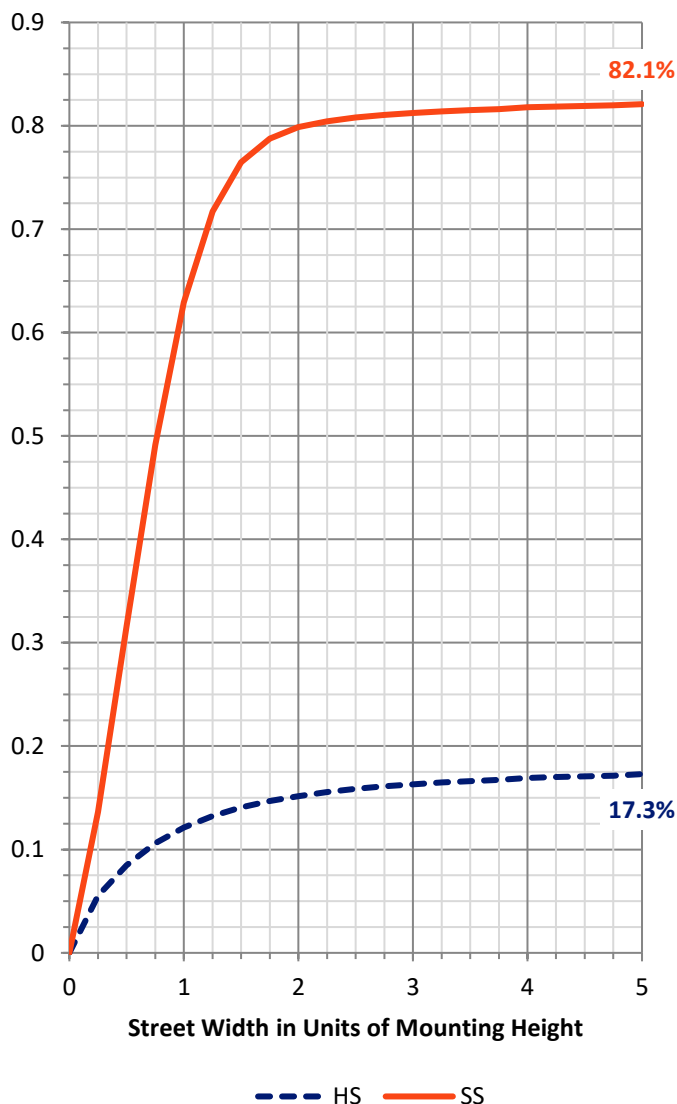
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1664.2	0.0	1664.2
	% Fixture	17.6	0.0	17.6
Street Side	Lumens	7771.8	0.0	7771.8
	% Fixture	82.4	0.0	82.4
Total	Lumens	9436.0	0.0	9436.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.8	1.0
10°-20°	390.5	4.1
20°-30°	772.5	8.2
30°-40°	1287.6	13.6
40°-50°	1900.0	20.1
50°-60°	2284.0	24.2
60°-70°	1775.1	18.8
70°-80°	785.3	8.3
80°-90°	142.2	1.5
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°	9436.0	100.0
0°-180°	9436.0	100.0

Coefficient of Utilization



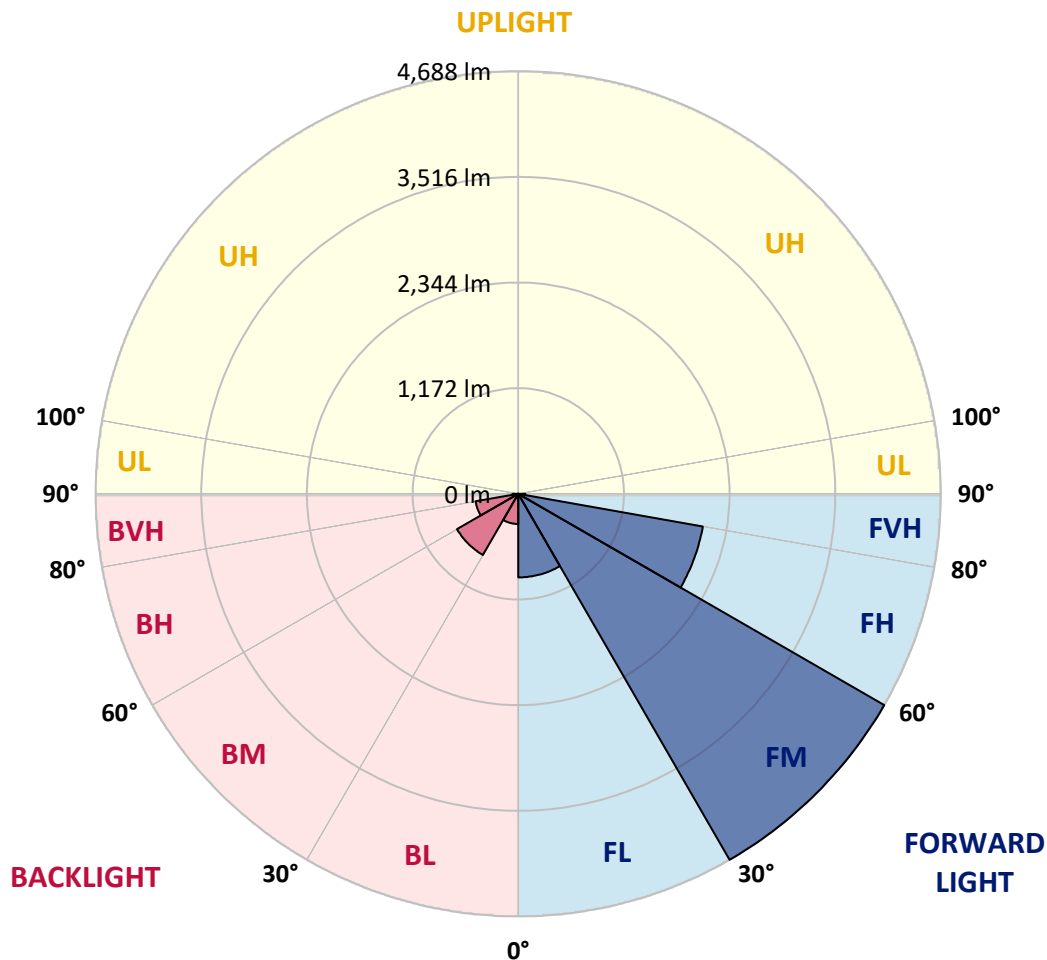
REPORT NUMBER: P573518
 CATALOG NUMBER: ARCH-S-PA2-80-830-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	926.9	9.8			
FM (30°-60°)	4687.8	49.7			
FH (60°-80°)	2078.9	22.0			G2/5000
FVH (80°-90°)	78.1	0.8			G1/100
BL (0°-30°)	334.9	3.5	B1/500		
BM (30°-60°)	783.8	8.3	B1/1000		
BH (60°-80°)	481.5	5.1	B1/500		G1/500
BVH (80°-90°)	64.0	0.7			G1/100
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





REPORT NUMBER: P573518

CATALOG NUMBER: ARCH-S-PA2-80-830-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5
2.5°	1051.7	1021.1	1021.1	988.0	990.6	962.6	932.0	901.4	868.3	842.9	830.1
5°	1375.1	1352.2	1344.5	1306.3	1245.2	1176.5	1102.6	1026.2	947.3	886.2	855.6
7.5°	1678.1	1660.3	1650.1	1606.8	1522.8	1448.9	1331.8	1191.7	1056.8	942.2	896.4
10°	1902.2	1889.5	1869.1	1848.7	1787.6	1724.0	1578.8	1380.2	1181.6	1010.9	942.2
12.5°	2065.2	2047.4	2047.4	2044.8	2004.1	1945.5	1810.5	1596.6	1326.7	1087.3	993.1
15°	2174.7	2172.1	2179.8	2195.0	2184.9	2146.7	2011.7	1795.3	1474.4	1173.9	1051.7
17.5°	2256.2	2246.0	2261.3	2302.0	2332.6	2317.3	2205.2	1986.2	1637.4	1268.1	1115.3
20°	2345.3	2324.9	2345.3	2396.2	2434.4	2457.3	2403.9	2169.6	1813.1	1370.0	1176.5
22.5°	2515.9	2513.4	2503.2	2518.4	2543.9	2584.7	2554.1	2355.5	1983.7	1471.9	1247.8
25°	2821.5	2793.5	2765.5	2732.3	2704.3	2717.1	2691.6	2528.6	2139.0	1583.9	1308.9
27.5°	3162.7	3132.1	3081.2	2999.7	2923.3	2877.5	2824.0	2678.9	2289.3	1685.8	1367.4
30°	3475.9	3465.7	3389.3	3300.2	3167.8	3083.8	2981.9	2852.0	2470.1	1797.8	1428.6
32.5°	3768.8	3748.4	3672.0	3577.8	3422.4	3328.2	3188.2	3040.5	2676.3	1935.3	1492.2
35°	4020.9	4000.5	3911.4	3791.7	3656.7	3575.2	3414.8	3208.5	2864.8	2055.0	1545.7
37.5°	4211.8	4188.9	4104.9	3987.8	3868.1	3829.9	3692.4	3422.4	3078.7	2205.2	1611.9
40°	4318.8	4290.8	4234.8	4153.3	4054.0	4036.1	3977.6	3687.3	3348.6	2388.6	1708.7
42.5°	4331.5	4306.1	4275.5	4267.9	4260.2	4275.5	4303.5	3987.8	3656.7	2633.0	1851.3
45°	4219.5	4204.2	4206.7	4293.3	4413.0	4553.1	4721.1	4430.8	4071.8	3099.0	2172.1
47.5°	3980.1	3972.5	4028.5	4173.6	4441.0	4759.3	5235.5	5189.7	5054.7	3850.2	2584.7
50°	3593.0	3580.3	3700.0	3929.2	4311.2	4828.1	5581.8	6083.5	6195.5	4433.4	2854.6
52.5°	3037.9	3053.2	3239.1	3552.3	4013.2	4754.2	5724.4	6450.2	6745.6	4863.7	3060.8
55°	2470.1	2447.1	2615.2	3002.3	3572.7	4484.3	5752.4	6661.5	7102.1	5261.0	3262.0
57.5°	1800.3	1856.4	2034.6	2386.0	3004.8	3995.4	5589.5	6806.7	7580.8	5658.2	3447.9
60°	1219.8	1219.8	1377.6	1729.0	2322.4	3402.1	5154.0	6753.2	7998.4	5968.9	3488.6
62.5°	776.7	769.0	896.4	1145.9	1662.8	2643.2	4502.1	6417.1	8146.1	6042.7	3318.0
65°	491.5	501.7	547.5	700.3	1064.4	1876.7	3613.4	5747.4	7904.2	5872.1	3020.1
67.5°	394.7	397.2	420.2	483.8	654.4	1204.5	2678.9	4823.0	7326.2	5441.8	2671.2
70°	348.9	354.0	359.1	382.0	448.2	761.4	1759.6	3883.3	6378.9	4693.1	2296.9
72.5°	318.3	323.4	328.5	333.6	369.2	496.6	1039.0	2943.7	5146.4	3605.8	1752.0
75°	292.8	297.9	297.9	300.5	320.9	369.2	570.4	2029.5	3582.9	2243.4	1092.4
77.5°	262.3	264.8	264.8	269.9	290.3	290.3	354.0	1255.4	1988.8	1016.0	552.6
80°	221.5	226.6	226.6	234.3	254.6	224.1	236.8	641.7	825.1	417.6	247.0
82.5°	163.0	173.2	178.3	191.0	203.7	170.6	170.6	323.4	348.9	185.9	132.4
85°	89.1	91.7	132.4	142.6	150.2	101.9	114.6	160.4	173.2	81.5	66.2
87.5°	25.5	28.0	63.7	78.9	71.3	43.3	48.4	61.1	61.1	22.9	17.8
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: P573518
 CATALOG NUMBER: ARCH-S-PA2-80-830-U-T2R

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5	822.5
2.5°	820.0	799.6	781.8	769.0	756.3	748.7	746.1	741.0	741.0	743.6
5°	830.1	794.5	766.5	751.2	741.0	735.9	733.4	733.4	735.9	735.9
7.5°	855.6	802.1	776.7	763.9	753.8	748.7	748.7	746.1	748.7	748.7
10°	891.3	825.1	797.0	781.8	774.1	766.5	763.9	761.4	761.4	761.4
12.5°	929.5	850.5	820.0	802.1	789.4	779.2	774.1	769.0	766.5	766.5
15°	965.1	876.0	835.2	814.9	797.0	781.8	771.6	763.9	761.4	761.4
17.5°	1003.3	893.8	845.4	817.4	794.5	774.1	761.4	751.2	746.1	746.1
20°	1044.0	906.5	845.4	809.8	779.2	758.8	743.6	733.4	723.2	723.2
22.5°	1077.2	911.6	835.2	791.9	761.4	735.9	720.6	707.9	700.3	700.3
25°	1105.2	906.5	812.3	763.9	728.3	705.4	690.1	679.9	672.3	672.3
27.5°	1123.0	886.2	784.3	733.4	700.3	677.4	667.2	657.0	651.9	651.9
30°	1133.2	860.7	748.7	700.3	667.2	654.4	649.3	639.2	631.5	629.0
32.5°	1138.3	822.5	713.0	667.2	644.3	639.2	639.2	626.4	616.2	613.7
35°	1133.2	781.8	677.4	639.2	631.5	634.1	629.0	613.7	601.0	595.9
37.5°	1125.5	733.4	639.2	618.8	626.4	631.5	616.2	595.9	575.5	570.4
40°	1120.4	690.1	608.6	598.4	621.3	623.9	595.9	557.7	542.4	537.3
42.5°	1145.9	646.8	580.6	583.1	608.6	611.1	560.2	542.4	532.2	529.7
45°	1232.5	608.6	557.7	573.0	593.3	583.1	542.4	539.8	532.2	529.7
47.5°	1298.7	580.6	547.5	565.3	580.6	544.9	539.8	537.3	529.7	527.1
50°	1321.6	562.8	544.9	560.2	562.8	527.1	534.8	534.8	527.1	524.6
52.5°	1324.2	552.6	550.0	557.7	534.8	519.5	529.7	529.7	522.0	519.5
55°	1334.3	547.5	552.6	557.7	504.2	509.3	519.5	522.0	514.4	511.8
57.5°	1314.0	539.8	557.7	560.2	491.5	499.1	509.3	509.3	509.3	509.3
60°	1235.0	524.6	555.1	555.1	481.3	486.4	496.6	501.7	504.2	504.2
62.5°	1089.9	494.0	539.8	539.8	471.1	476.2	488.9	488.9	496.6	496.6
65°	906.5	450.7	509.3	506.7	460.9	466.0	481.3	476.2	488.9	491.5
67.5°	756.3	397.2	463.5	468.5	450.7	463.5	473.6	455.8	481.3	481.3
70°	603.5	333.6	402.3	425.3	432.9	466.0	458.4	430.4	463.5	455.8
72.5°	468.5	282.7	331.0	371.8	412.5	463.5	425.3	394.7	415.1	402.3
75°	341.2	234.3	272.5	308.1	384.5	455.8	392.2	346.3	346.3	341.2
77.5°	239.4	191.0	219.0	244.5	356.5	435.4	351.4	297.9	285.2	282.7
80°	163.0	150.2	173.2	188.4	315.8	394.7	303.0	247.0	224.1	219.0
82.5°	107.0	107.0	117.1	127.3	244.5	328.5	236.8	183.3	236.8	226.6
85°	61.1	63.7	63.7	73.8	135.0	231.7	168.1	183.3	109.5	101.9
87.5°	20.4	20.4	20.4	20.4	28.0	94.2	71.3	66.2	25.5	22.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)