

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: P397833

Luminaire Tested: **ARCH-S-PA1-50-730-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397833
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-730-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5553 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

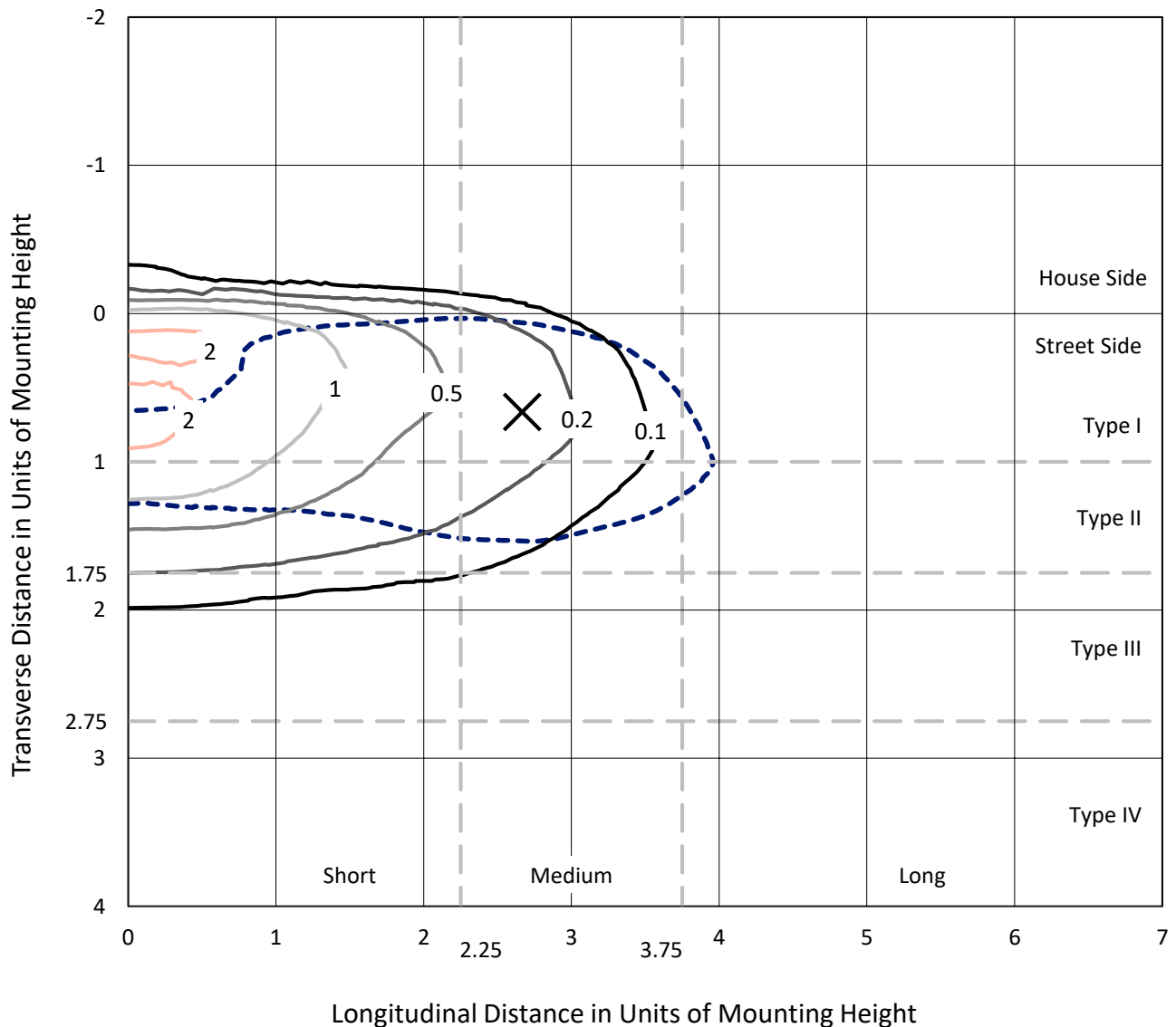
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

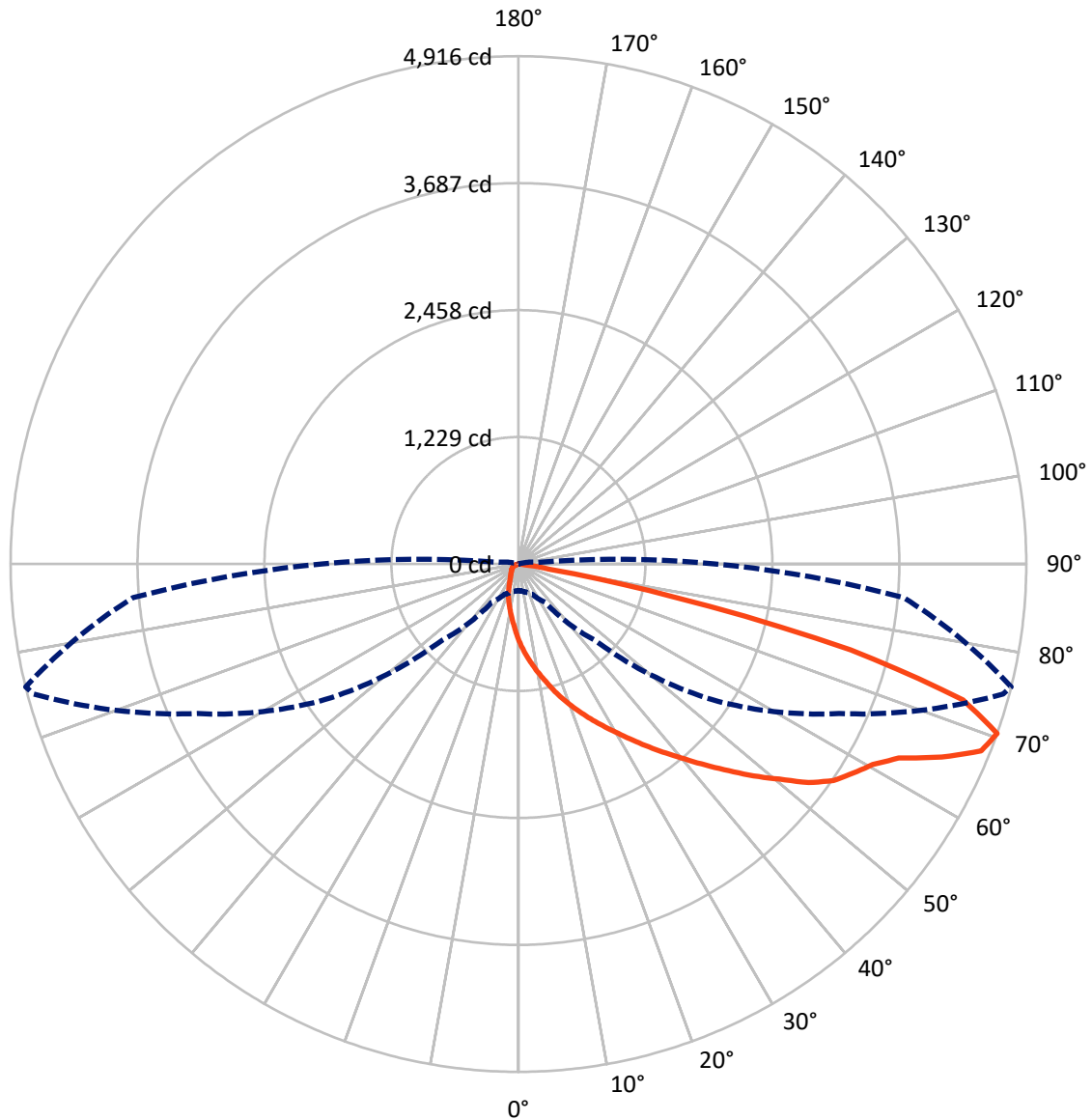
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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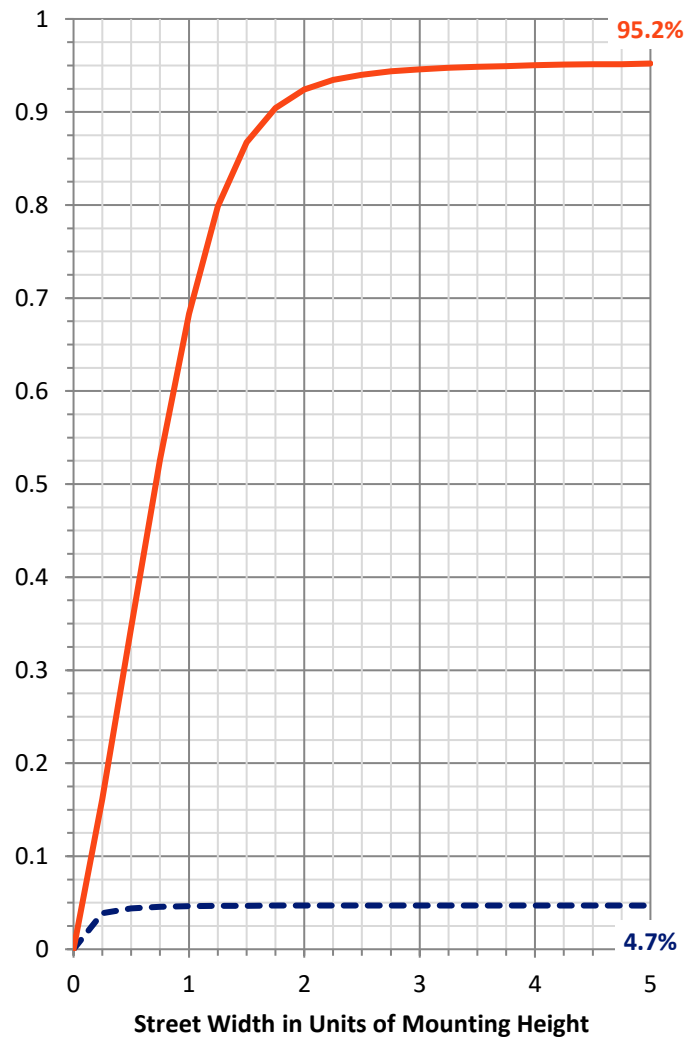
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	261.9	0.0	261.9
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	5291.1	0.0	5291.1
	% Fixture	95.3	0.0	95.3
Total	Lumens	5553.0	0.0	5553.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.0	1.3
10°-20°	226.0	4.1
20°-30°	420.9	7.6
30°-40°	744.5	13.4
40°-50°	1138.5	20.5
50°-60°	1290.8	23.2
60°-70°	1106.5	19.9
70°-80°	535.9	9.7
80°-90°	19.9	0.4
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°	5553.0	100.0
0°-180°	5553.0	100.0

Coefficient of Utilization



--- HS — SS

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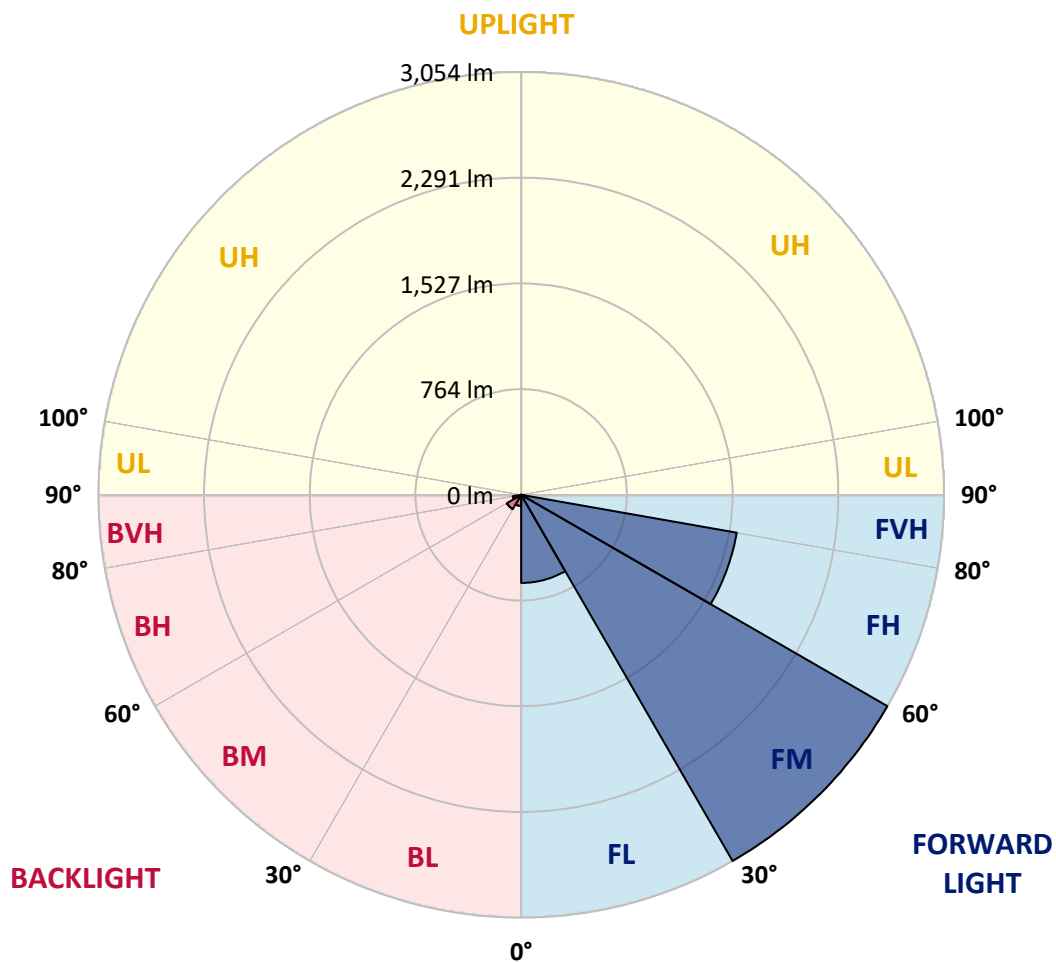
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	636.6	11.5			
FM	(30°-60°)	3054.2	55.0			
FH	(60°-80°)	1580.8	28.5			G1/1800
FVH	(80°-90°)	19.5	0.4			G1/100
BL	(0°-30°)	80.3	1.4	B0/110		
BM	(30°-60°)	119.5	2.2	B0/220		
BH	(60°-80°)	61.7	1.1	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3
2.5°	1016.0	1010.5	1004.9	983.7	964.3	946.7	913.4	870.0	831.1	822.8	777.5
5°	1193.5	1187.1	1178.7	1157.5	1132.5	1102.9	1053.9	987.4	919.0	904.2	820.0
7.5°	1313.7	1308.2	1296.2	1286.0	1261.0	1232.4	1177.8	1100.2	1005.9	987.4	869.0
10°	1396.0	1392.3	1390.5	1382.1	1363.6	1340.5	1286.0	1204.6	1093.7	1072.4	920.8
12.5°	1425.6	1425.6	1434.8	1448.7	1451.5	1444.1	1394.2	1312.8	1186.1	1164.0	981.8
15°	1385.8	1390.5	1410.8	1455.2	1501.4	1531.9	1500.5	1424.7	1287.8	1263.8	1053.9
17.5°	1374.7	1379.4	1393.2	1432.1	1494.0	1575.4	1591.1	1532.8	1384.0	1363.6	1127.9
20°	1406.2	1410.8	1422.8	1456.1	1503.3	1585.5	1651.2	1637.3	1485.7	1464.4	1202.8
22.5°	1481.1	1483.8	1483.8	1509.7	1551.3	1612.3	1689.1	1736.2	1590.2	1567.0	1276.7
25°	1641.9	1636.4	1614.2	1601.2	1628.1	1678.0	1737.2	1823.1	1706.6	1675.2	1356.3
27.5°	1852.7	1871.2	1817.6	1755.6	1735.3	1764.0	1804.6	1899.9	1819.4	1786.2	1428.4
30°	2138.4	2131.0	2060.7	1972.0	1884.1	1874.0	1887.8	1965.5	1932.2	1900.8	1508.8
32.5°	2373.2	2387.1	2313.1	2205.0	2073.7	2011.7	1996.9	2044.1	2052.4	2032.1	1604.0
35°	2614.5	2629.3	2557.2	2437.0	2280.8	2177.2	2134.7	2141.2	2201.3	2175.4	1703.9
37.5°	2830.8	2843.8	2772.6	2649.6	2493.4	2366.7	2305.7	2255.8	2345.5	2322.4	1809.3
40°	2995.4	2997.3	2949.2	2839.2	2691.2	2560.0	2490.6	2392.6	2498.0	2482.3	1919.3
42.5°	3111.9	3115.6	3080.5	2986.2	2849.3	2727.3	2670.9	2554.4	2673.7	2659.8	2046.9
45°	3166.4	3172.9	3169.2	3082.3	2968.6	2863.2	2844.7	2726.4	2866.0	2853.0	2193.9
47.5°	3114.7	3114.7	3161.8	3149.8	3045.3	2975.1	2996.3	2905.7	3074.9	3062.9	2343.6
50°	2899.3	2902.0	2998.2	3135.9	3074.9	3059.2	3125.8	3081.4	3264.4	3271.8	2523.0
52.5°	2333.5	2328.8	2653.3	2917.7	3054.6	3097.1	3245.0	3260.7	3491.9	3514.1	2701.4
55°	1743.6	1740.8	2051.5	2531.3	2912.2	3077.7	3311.6	3420.7	3686.0	3699.9	2834.5
57.5°	1380.3	1372.9	1543.9	2040.4	2590.5	2990.8	3314.4	3451.2	3794.2	3818.2	2964.0
60°	1061.3	1054.9	1182.4	1518.0	2134.7	2759.7	3234.9	3453.0	3898.7	3941.2	3137.8
62.5°	759.0	766.4	864.4	1089.1	1641.9	2433.3	3131.3	3478.9	4084.5	4132.6	3384.6
65°	512.2	508.5	589.8	741.5	1167.7	1994.2	2972.3	3533.5	4419.1	4503.3	3680.5
67.5°	355.9	358.7	395.7	482.6	741.5	1531.0	2707.9	3564.0	4764.9	4830.6	3887.6
70°	257.0	260.7	281.1	324.5	453.0	1038.2	2289.1	3424.4	4858.3	4915.6	3743.3
72.5°	169.2	176.6	207.1	230.2	289.4	649.9	1686.3	2950.1	4456.1	4498.7	3140.6
75°	91.5	93.4	133.1	172.0	206.2	404.9	1005.9	1989.5	3333.8	3319.9	2070.9
77.5°	71.2	74.0	82.3	123.0	138.7	222.8	397.5	898.6	1579.1	1536.5	706.3
80°	43.5	45.3	57.3	73.0	97.1	129.4	116.5	244.1	320.8	300.5	103.5
82.5°	25.9	27.7	34.2	61.0	76.7	61.0	40.7	59.2	60.1	59.2	25.9
85°	4.6	4.6	24.0	42.5	40.7	17.6	24.0	19.4	17.6	18.5	5.5
87.5°	0.0	0.0	9.2	12.9	18.5	6.5	9.2	4.6	4.6	4.6	2.8
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°	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3	743.3
2.5°	749.8	718.3	653.6	597.2	540.8	499.2	467.8	435.4	424.3	410.5	403.1
5°	762.7	700.8	572.3	469.7	382.7	316.2	273.7	247.8	231.1	219.1	216.3
7.5°	782.1	686.9	506.6	368.0	272.7	206.2	171.0	153.5	144.2	138.7	136.8
10°	805.2	674.9	441.9	286.6	192.3	145.1	125.7	118.3	114.6	112.8	111.9
12.5°	837.6	670.3	387.4	221.0	145.1	119.3	109.1	104.5	101.7	98.9	98.0
15°	880.1	672.1	337.4	171.0	120.2	106.3	98.0	93.4	89.7	86.9	86.9
17.5°	924.5	674.9	288.4	138.7	109.1	97.1	87.8	81.4	78.6	75.8	74.9
20°	966.1	674.0	241.3	118.3	98.9	86.9	77.7	71.2	66.6	63.8	63.8
22.5°	1005.9	668.4	196.9	106.3	90.6	76.7	66.6	60.1	56.4	53.6	53.6
25°	1048.4	657.3	160.9	97.1	80.4	67.5	57.3	50.8	48.1	45.3	45.3
27.5°	1081.7	638.8	131.3	88.8	71.2	58.2	49.0	43.5	40.7	38.8	38.8
30°	1117.7	612.0	109.1	79.5	61.9	49.9	41.6	37.0	34.2	33.3	33.3
32.5°	1157.5	582.4	93.4	70.3	52.7	42.5	35.1	32.4	29.6	28.7	28.7
35°	1203.7	556.6	84.1	61.0	46.2	36.1	30.5	27.7	25.9	25.9	25.9
37.5°	1256.4	529.7	75.8	53.6	39.8	30.5	25.9	25.0	24.0	23.1	23.1
40°	1313.7	501.1	68.4	47.1	34.2	25.9	22.2	22.2	21.3	21.3	21.3
42.5°	1378.4	476.1	61.9	41.6	29.6	22.2	19.4	19.4	18.5	18.5	18.5
45°	1448.7	453.0	56.4	37.0	25.9	19.4	17.6	16.6	15.7	15.7	15.7
47.5°	1531.9	440.1	51.8	32.4	22.2	16.6	14.8	13.9	12.9	12.0	12.0
50°	1638.2	445.6	47.1	26.8	19.4	13.9	12.0	11.1	10.2	9.2	9.2
52.5°	1722.4	442.8	40.7	23.1	15.7	11.1	9.2	8.3	7.4	6.5	6.5
55°	1783.4	431.7	35.1	19.4	12.0	9.2	7.4	5.5	4.6	4.6	4.6
57.5°	1843.5	420.7	29.6	15.7	9.2	6.5	4.6	3.7	3.7	3.7	3.7
60°	1936.8	404.9	25.9	12.9	7.4	4.6	2.8	2.8	1.8	1.8	1.8
62.5°	2050.6	385.5	21.3	11.1	5.5	3.7	1.8	1.8	0.0	0.0	0.0
65°	2175.4	351.3	17.6	8.3	4.6	2.8	1.8	0.0	0.0	0.0	0.0
67.5°	2146.7	282.0	14.8	5.5	3.7	1.8	0.9	0.0	0.0	0.0	0.0
70°	1898.9	190.4	12.0	4.6	2.8	1.8	0.9	0.0	0.0	0.0	0.0
72.5°	1487.5	112.8	8.3	3.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0
75°	952.2	56.4	5.5	2.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	319.0	27.7	3.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	45.3	9.2	1.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.2	3.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.9	0.0	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)