

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: P398049

Luminaire Tested: **ARCH-S-PA1-80-730-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398049
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-PA1-80-730-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1050mA 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: 7681 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

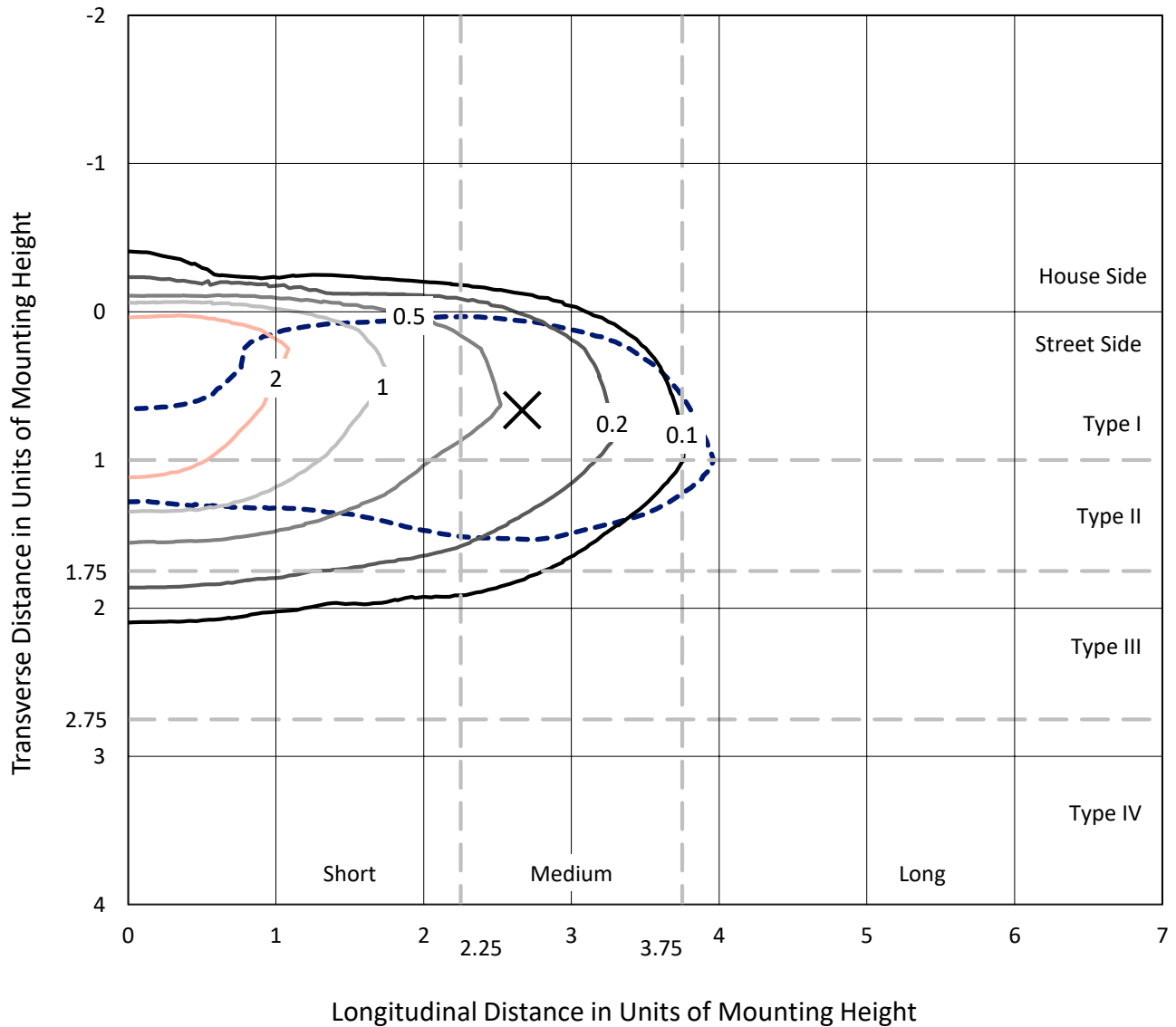
Input Watts (W): 83
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

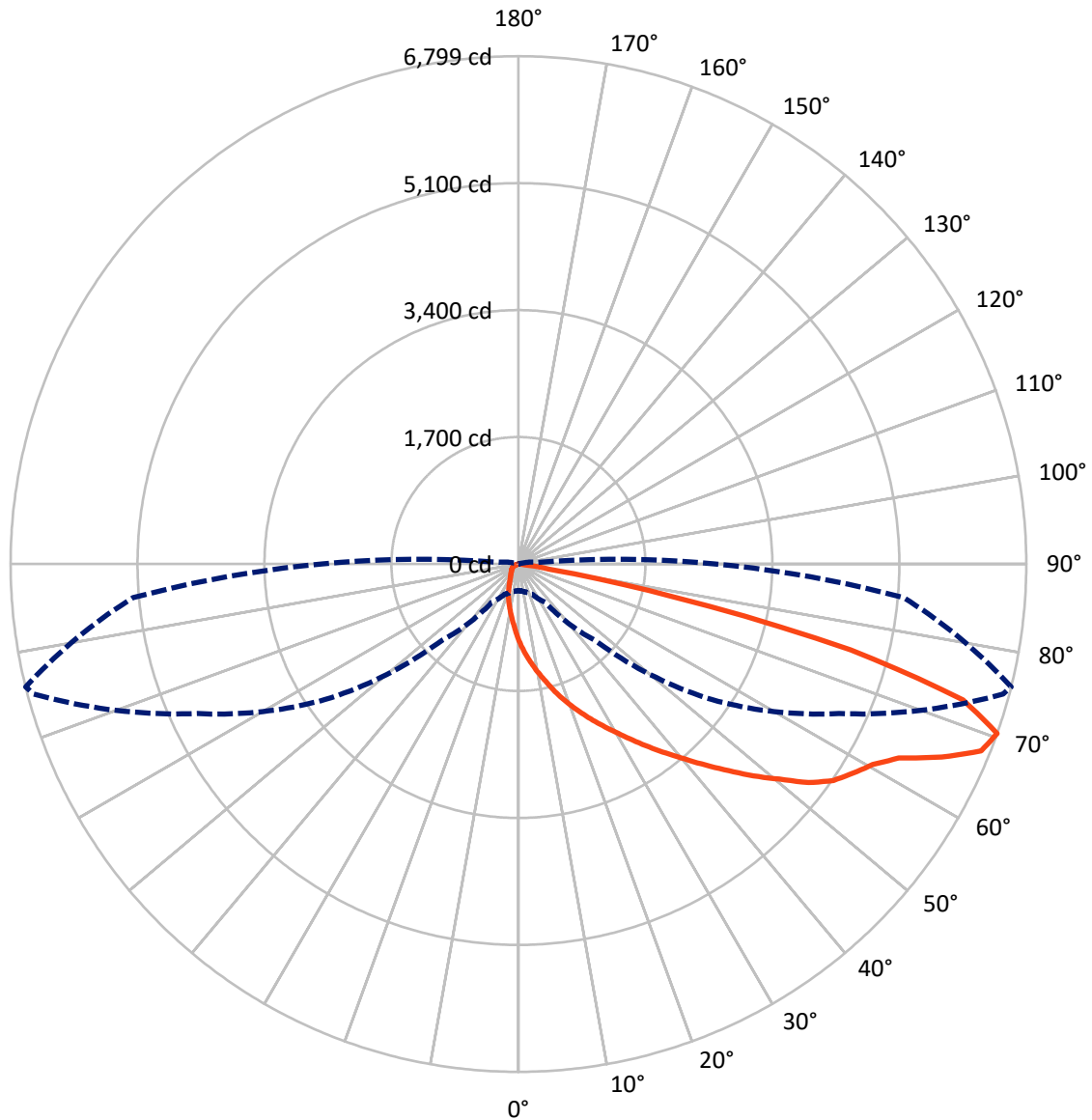
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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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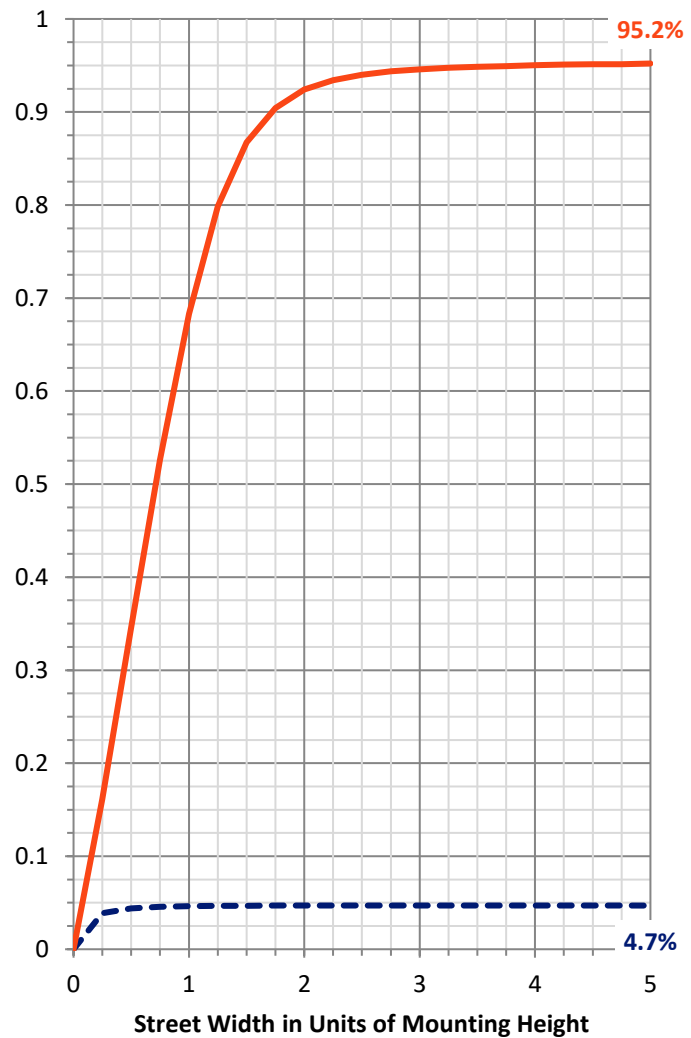
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	362.3	0.0	362.3
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	7318.7	0.0	7318.7
	% Fixture	95.3	0.0	95.3
Total	Lumens	7681.0	0.0	7681.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	1.3
10°-20°	312.6	4.1
20°-30°	582.2	7.6
30°-40°	1029.8	13.4
40°-50°	1574.8	20.5
50°-60°	1785.4	23.2
60°-70°	1530.6	19.9
70°-80°	741.3	9.7
80°-90°	27.5	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°	7681.0	100.0
0°-180°	7681.0	100.0

Coefficient of Utilization



--- HS — SS

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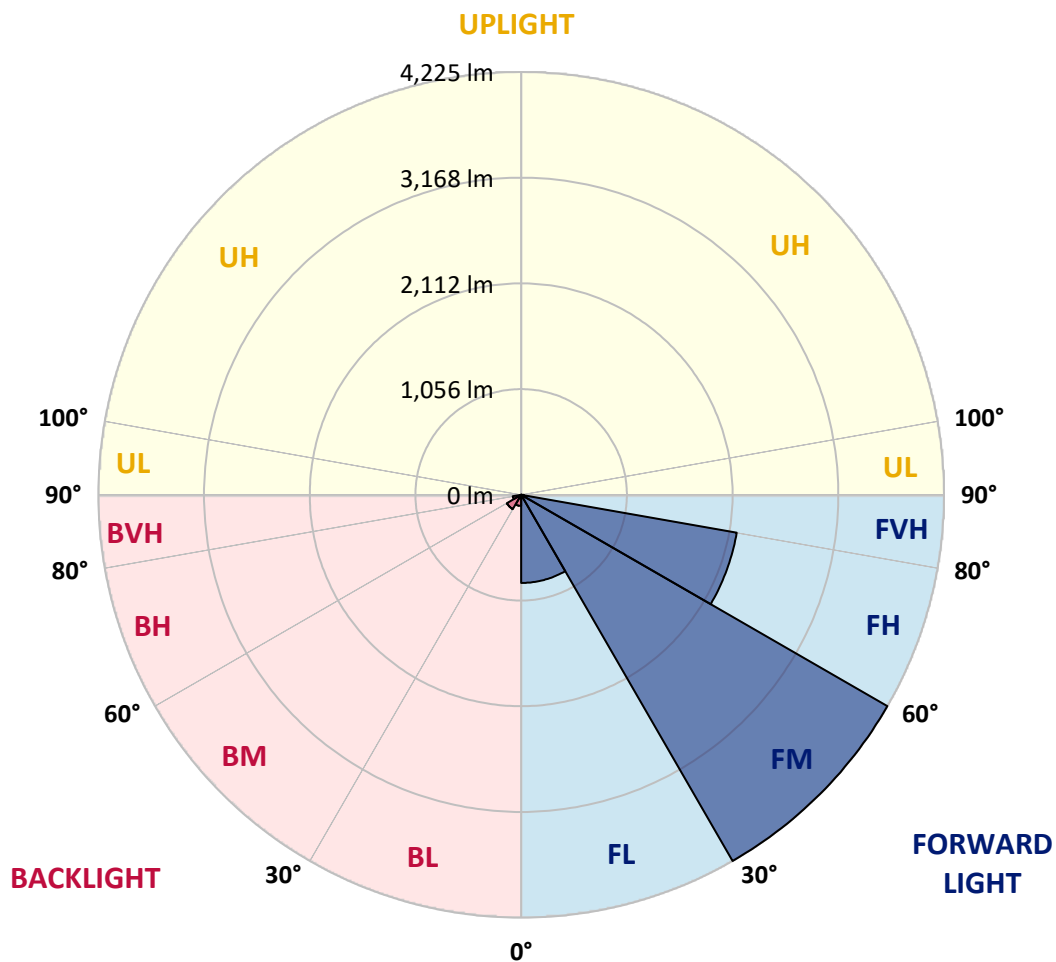
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	880.5	11.5			
FM	(30°-60°)	4224.6	55.0			
FH	(60°-80°)	2186.6	28.5			G2/5000
FVH	(80°-90°)	27.0	0.4			G1/100
BL	(0°-30°)	111.1	1.4	B1/500		
BM	(30°-60°)	165.4	2.2	B0/220		
BH	(60°-80°)	85.3	1.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2
2.5°	1405.4	1397.7	1390.1	1360.6	1333.8	1309.5	1263.4	1203.3	1149.6	1138.1	1075.5
5°	1650.9	1642.0	1630.5	1601.1	1566.5	1525.6	1457.8	1365.8	1271.1	1250.7	1134.3
7.5°	1817.2	1809.5	1792.9	1778.8	1744.3	1704.6	1629.2	1521.8	1391.3	1365.8	1202.1
10°	1931.0	1925.9	1923.3	1911.8	1886.2	1854.3	1778.8	1666.3	1512.8	1483.4	1273.7
12.5°	1971.9	1971.9	1984.7	2003.9	2007.7	1997.5	1928.4	1815.9	1640.7	1610.0	1358.1
15°	1916.9	1923.3	1951.4	2012.8	2076.8	2119.0	2075.5	1970.6	1781.4	1748.1	1457.8
17.5°	1901.6	1908.0	1927.1	1980.9	2066.5	2179.1	2200.8	2120.2	1914.4	1886.2	1560.1
20°	1945.0	1951.4	1968.1	2014.1	2079.3	2193.1	2283.9	2264.7	2055.0	2025.6	1663.7
22.5°	2048.6	2052.5	2052.5	2088.3	2145.8	2230.2	2336.4	2401.6	2199.5	2167.6	1766.0
25°	2271.1	2263.5	2232.8	2214.9	2252.0	2321.0	2402.9	2521.8	2360.7	2317.2	1876.0
27.5°	2562.7	2588.3	2514.1	2428.4	2400.3	2439.9	2496.2	2627.9	2516.7	2470.6	1975.7
30°	2957.9	2947.6	2850.4	2727.7	2606.2	2592.1	2611.3	2718.7	2672.7	2629.2	2087.0
32.5°	3282.7	3301.8	3199.5	3049.9	2868.3	2782.7	2762.2	2827.4	2838.9	2810.8	2218.7
35°	3616.4	3636.9	3537.1	3370.9	3154.8	3011.6	2952.7	2961.7	3044.8	3009.0	2356.8
37.5°	3915.7	3933.6	3835.1	3665.0	3448.9	3273.7	3189.3	3120.3	3244.3	3212.3	2502.6
40°	4143.3	4145.9	4079.4	3927.2	3722.6	3541.0	3445.1	3309.5	3455.3	3433.6	2654.8
42.5°	4304.4	4309.5	4260.9	4130.5	3941.2	3772.4	3694.4	3533.3	3698.3	3679.1	2831.3
45°	4379.9	4388.8	4383.7	4263.5	4106.2	3960.4	3934.9	3771.2	3964.3	3946.4	3034.6
47.5°	4308.3	4308.3	4373.5	4356.9	4212.4	4115.2	4144.6	4019.3	4253.3	4236.6	3241.7
50°	4010.3	4014.1	4147.1	4337.7	4253.3	4231.5	4323.6	4262.2	4515.4	4525.7	3489.8
52.5°	3227.7	3221.3	3670.1	4035.9	4225.1	4284.0	4488.6	4510.3	4830.0	4860.7	3736.6
55°	2411.8	2408.0	2837.6	3501.3	4028.2	4257.1	4580.6	4731.5	5098.6	5117.7	3920.8
57.5°	1909.2	1899.0	2135.6	2822.3	3583.2	4136.9	4584.5	4773.7	5248.2	5281.4	4099.8
60°	1468.1	1459.1	1635.6	2099.8	2952.7	3817.2	4474.5	4776.3	5392.7	5451.5	4340.2
62.5°	1049.9	1060.1	1195.7	1506.4	2271.1	3365.8	4331.3	4812.1	5649.7	5716.2	4681.7
65°	708.5	703.3	815.9	1025.6	1615.1	2758.4	4111.3	4887.6	6112.6	6229.0	5090.9
67.5°	492.3	496.2	547.3	667.5	1025.6	2117.7	3745.6	4929.8	6590.9	6681.7	5377.3
70°	355.5	360.6	388.8	448.9	626.6	1436.1	3166.3	4736.7	6720.1	6799.4	5177.8
72.5°	234.0	244.2	286.5	318.4	400.3	899.0	2332.5	4080.6	6163.8	6222.6	4344.1
75°	126.6	129.2	184.1	237.9	285.2	560.1	1391.3	2752.0	4611.3	4592.2	2864.5
77.5°	98.5	102.3	113.8	170.1	191.8	308.2	549.9	1243.0	2184.2	2125.4	977.0
80°	60.1	62.7	79.3	101.0	134.3	179.0	161.1	337.6	443.7	415.6	143.2
82.5°	35.8	38.4	47.3	84.4	106.1	84.4	56.3	81.8	83.1	81.8	35.8
85°	6.4	6.4	33.2	58.8	56.3	24.3	33.2	26.9	24.3	25.6	7.7
87.5°	0.0	0.0	12.8	17.9	25.6	9.0	12.8	6.4	6.4	6.4	3.8
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°	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2	1028.2
2.5°	1037.1	993.6	904.1	826.1	748.1	690.5	647.1	602.3	587.0	567.8	557.6
5°	1055.0	969.3	791.6	649.6	529.4	437.3	378.5	342.7	319.7	303.1	299.2
7.5°	1081.9	950.1	700.8	509.0	377.2	285.2	236.6	212.3	199.5	191.8	189.3
10°	1113.8	933.5	611.3	396.4	266.0	200.8	173.9	163.7	158.6	156.0	154.7
12.5°	1158.6	927.1	535.8	305.6	200.8	165.0	150.9	144.5	140.7	136.8	135.6
15°	1217.4	929.7	466.8	236.6	166.2	147.1	135.6	129.2	124.0	120.2	120.2
17.5°	1278.8	933.5	399.0	191.8	150.9	134.3	121.5	112.5	108.7	104.9	103.6
20°	1336.3	932.2	333.8	163.7	136.8	120.2	107.4	98.5	92.1	88.2	88.2
22.5°	1391.3	924.6	272.4	147.1	125.3	106.1	92.1	83.1	78.0	74.2	74.2
25°	1450.2	909.2	222.5	134.3	111.3	93.4	79.3	70.3	66.5	62.7	62.7
27.5°	1496.2	883.6	181.6	122.8	98.5	80.6	67.8	60.1	56.3	53.7	53.7
30°	1546.1	846.6	150.9	110.0	85.7	69.1	57.5	51.2	47.3	46.0	46.0
32.5°	1601.1	805.6	129.2	97.2	72.9	58.8	48.6	44.8	40.9	39.6	39.6
35°	1665.0	769.8	116.4	84.4	63.9	49.9	42.2	38.4	35.8	35.8	35.8
37.5°	1737.9	732.7	104.9	74.2	55.0	42.2	35.8	34.5	33.2	32.0	32.0
40°	1817.2	693.1	94.6	65.2	47.3	35.8	30.7	30.7	29.4	29.4	29.4
42.5°	1906.7	658.6	85.7	57.5	40.9	30.7	26.9	26.9	25.6	25.6	25.6
45°	2003.9	626.6	78.0	51.2	35.8	26.9	24.3	23.0	21.7	21.7	21.7
47.5°	2119.0	608.7	71.6	44.8	30.7	23.0	20.5	19.2	17.9	16.6	16.6
50°	2266.0	616.4	65.2	37.1	26.9	19.2	16.6	15.3	14.1	12.8	12.8
52.5°	2382.4	612.5	56.3	32.0	21.7	15.3	12.8	11.5	10.2	9.0	9.0
55°	2466.8	597.2	48.6	26.9	16.6	12.8	10.2	7.7	6.4	6.4	6.4
57.5°	2549.9	581.9	40.9	21.7	12.8	9.0	6.4	5.1	5.1	5.1	5.1
60°	2679.1	560.1	35.8	17.9	10.2	6.4	3.8	3.8	2.6	2.6	2.6
62.5°	2836.4	533.3	29.4	15.3	7.7	5.1	2.6	2.6	0.0	0.0	0.0
65°	3009.0	485.9	24.3	11.5	6.4	3.8	2.6	0.0	0.0	0.0	0.0
67.5°	2969.4	390.0	20.5	7.7	5.1	2.6	1.3	0.0	0.0	0.0	0.0
70°	2626.6	263.4	16.6	6.4	3.8	2.6	1.3	0.0	0.0	0.0	0.0
72.5°	2057.6	156.0	11.5	5.1	2.6	1.3	0.0	0.0	0.0	0.0	0.0
75°	1317.2	78.0	7.7	3.8	2.6	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	441.2	38.4	5.1	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	62.7	12.8	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.1	5.1	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.1	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	1.3	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)