

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: P348853

Luminaire Tested: **ARCH-N-PA1-50-830-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348853
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-830-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3788 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 52
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

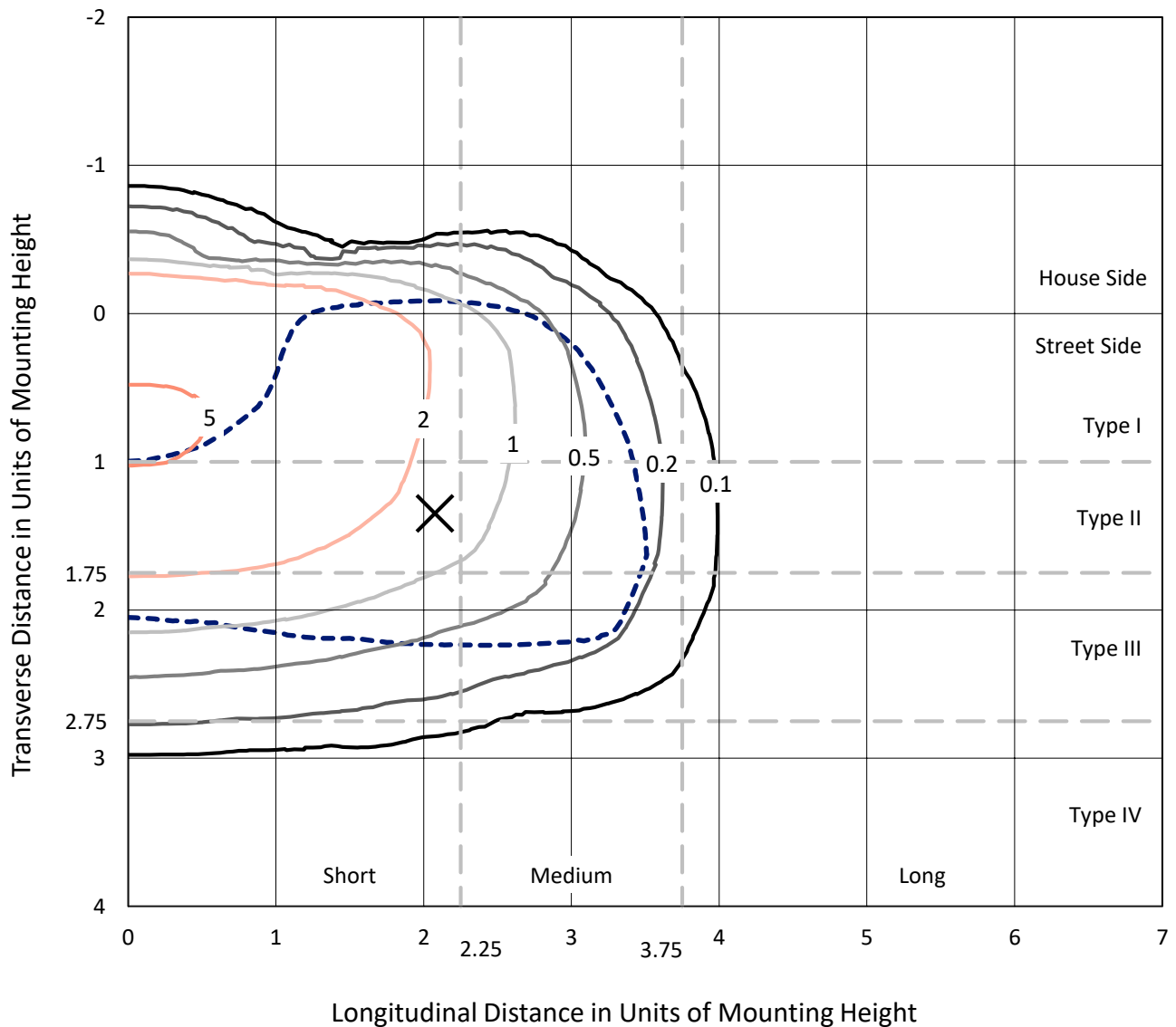


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

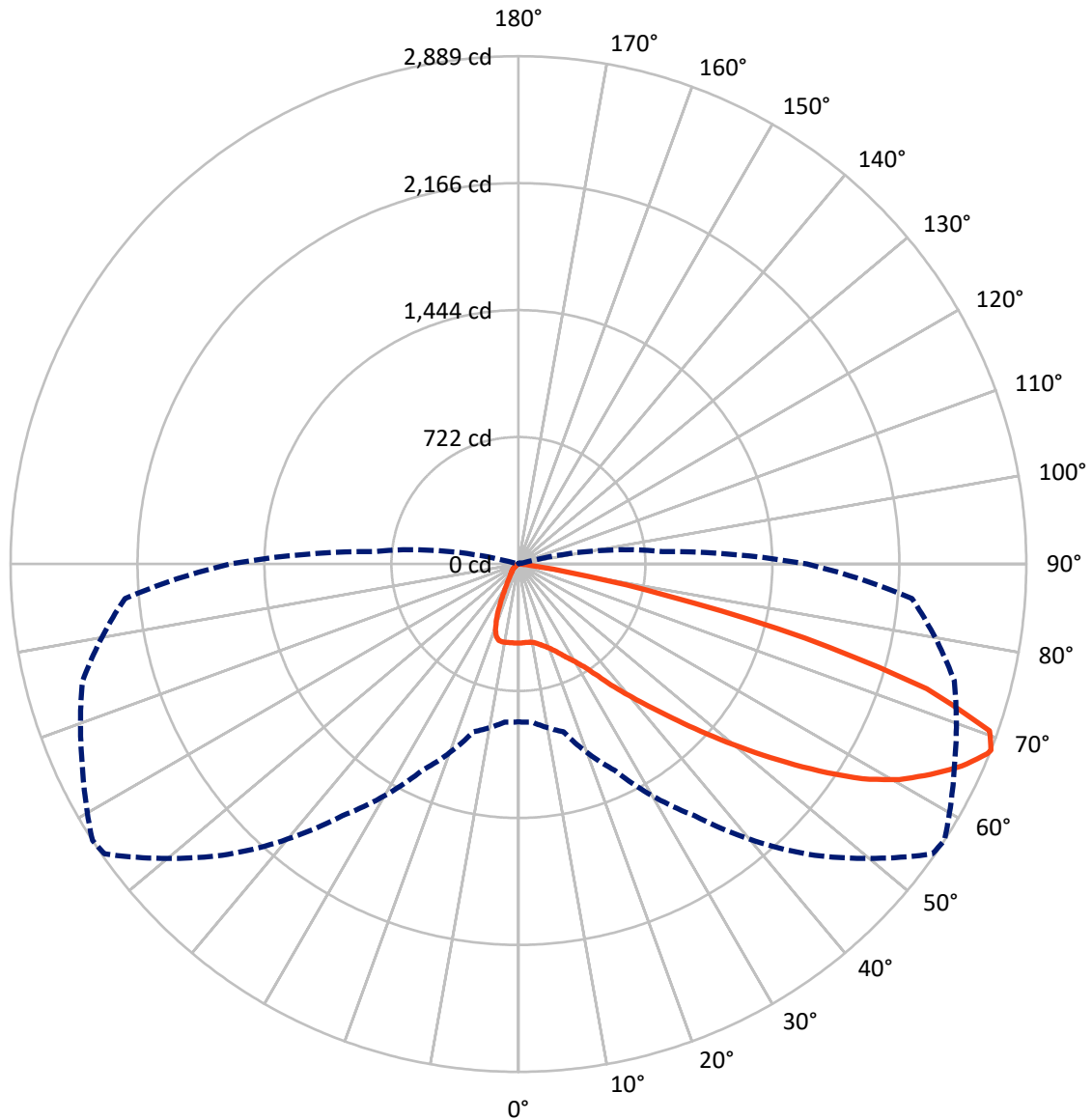


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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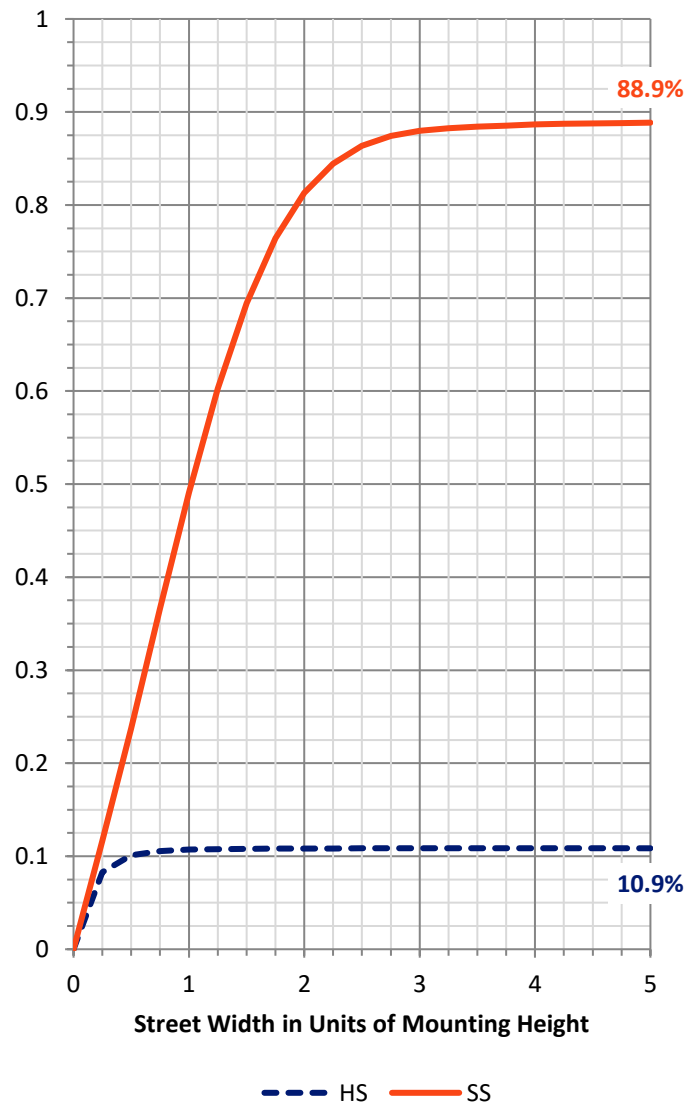
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	415.4	0.0	415.4
	% Fixture	11.0	0.0	11.0
Street Side	Lumens	3372.6	0.0	3372.6
	% Fixture	89.0	0.0	89.0
Total	Lumens	3788.0	0.0	3788.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	1.1
10°-20°	116.7	3.1
20°-30°	201.4	5.3
30°-40°	347.6	9.2
40°-50°	594.5	15.7
50°-60°	951.1	25.1
60°-70°	1098.9	29.0
70°-80°	419.9	11.1
80°-90°	15.7	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°	3788.0	100.0
0°-180°	3788.0	100.0

Coefficient of Utilization



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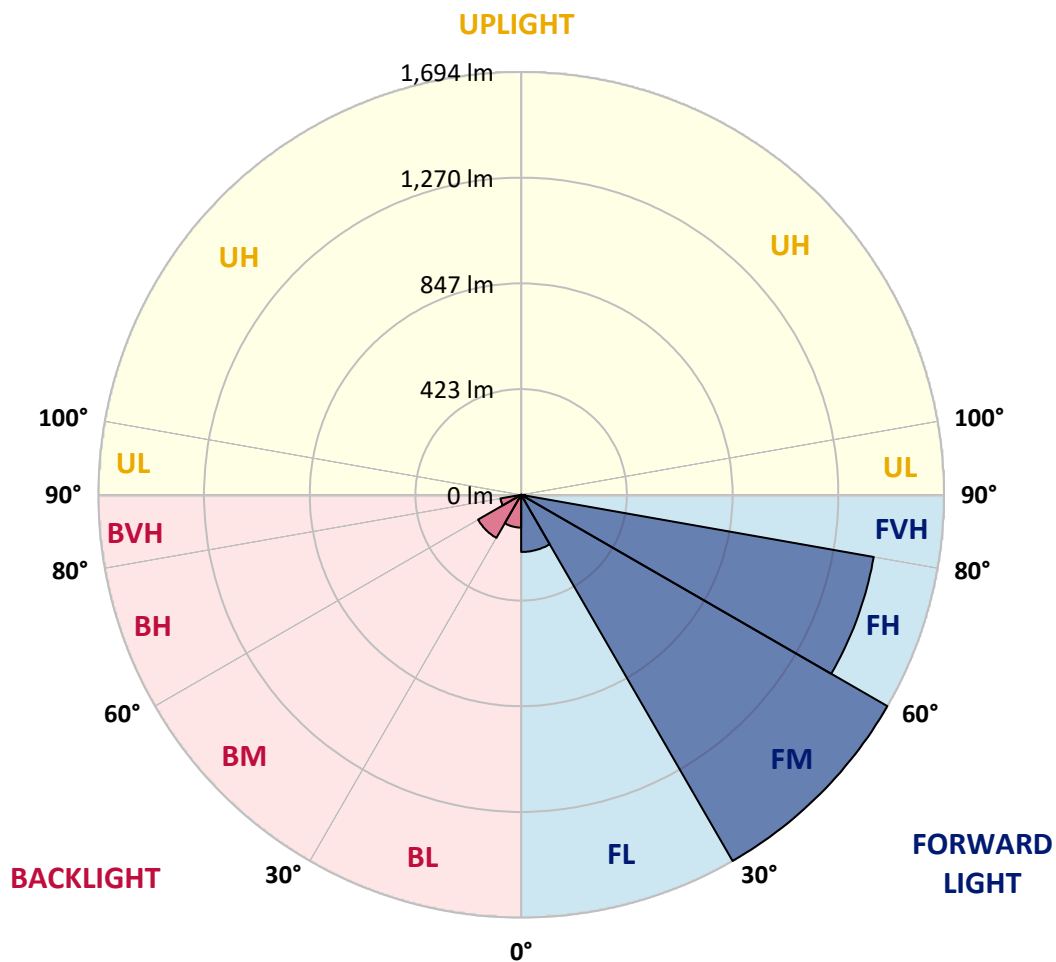
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	229.0	6.0			
FM	(30°-60°)	1694.0	44.7			
FH	(60°-80°)	1434.3	37.9			G1/1800
FVH	(80°-90°)	15.5	0.4			G1/100
BL	(0°-30°)	131.3	3.5	B1/500		
BM	(30°-60°)	199.2	5.3	B0/220		
BH	(60°-80°)	84.6	2.2	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: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1
2.5°	439.5	441.5	442.9	443.8	444.9	447.2	448.0	449.0	449.6	449.6	450.8
5°	422.2	424.3	427.4	429.9	434.9	441.3	446.0	447.8	451.0	453.9	455.5
7.5°	406.1	408.6	412.1	418.1	426.7	437.0	446.7	449.2	455.5	461.6	464.6
10°	395.7	397.6	402.3	410.7	422.0	436.5	450.1	453.2	463.9	474.1	479.8
12.5°	392.1	393.9	398.7	408.2	422.2	439.2	458.0	462.5	478.2	493.1	501.2
15°	397.3	397.6	402.8	411.8	425.6	445.8	471.1	476.4	496.3	515.7	525.7
17.5°	417.3	415.7	418.4	422.4	433.3	454.6	484.9	492.9	519.4	542.2	551.7
20°	467.5	467.5	461.4	450.7	450.8	468.2	503.5	512.6	545.0	571.4	580.0
22.5°	553.3	551.7	539.5	513.2	489.0	491.7	526.2	538.1	575.9	604.0	606.8
25°	656.5	654.5	635.7	598.6	556.7	529.6	557.0	570.7	612.6	637.5	631.6
27.5°	765.7	764.1	745.5	699.4	639.8	590.2	593.8	606.7	650.0	674.5	655.7
30°	871.6	872.1	853.7	806.4	738.8	667.4	640.3	647.9	686.4	711.3	684.4
32.5°	972.2	972.9	957.0	904.2	841.1	757.1	704.8	702.8	728.6	753.2	722.4
35°	1062.0	1063.8	1052.8	1011.8	945.0	857.1	788.5	783.8	788.6	816.4	780.6
37.5°	1148.5	1149.6	1141.3	1106.7	1050.9	966.9	894.1	887.5	877.1	898.4	857.4
40°	1243.2	1240.5	1231.1	1199.7	1151.7	1088.1	1007.7	996.2	978.1	997.1	958.4
42.5°	1331.4	1328.3	1329.9	1294.5	1254.0	1212.8	1140.1	1120.4	1109.8	1131.6	1082.4
45°	1441.5	1439.9	1445.3	1414.5	1381.7	1351.8	1291.8	1270.3	1265.6	1291.2	1232.3
47.5°	1550.2	1554.2	1570.8	1557.8	1544.5	1518.2	1452.4	1442.8	1445.6	1476.6	1390.5
50°	1640.9	1645.5	1691.2	1706.2	1725.4	1710.0	1644.1	1638.2	1649.5	1677.4	1560.6
52.5°	1706.4	1715.9	1772.7	1842.0	1911.9	1922.3	1856.5	1851.1	1866.4	1870.7	1692.1
55°	1751.9	1760.3	1824.6	1951.5	2093.7	2138.4	2097.6	2076.8	2074.0	2031.5	1830.4
57.5°	1760.0	1759.1	1851.5	2022.2	2236.2	2351.8	2326.0	2305.6	2246.8	2180.2	1988.9
60°	1714.5	1719.7	1827.0	2046.7	2325.8	2513.2	2515.1	2488.6	2397.1	2324.7	2142.6
62.5°	1574.4	1595.6	1703.9	1982.4	2324.7	2578.2	2653.8	2633.5	2524.1	2443.1	2298.4
65°	1347.3	1354.8	1458.2	1762.1	2167.6	2550.9	2778.6	2771.1	2638.5	2558.1	2378.5
67.5°	983.9	967.6	1076.1	1387.6	1835.2	2392.3	2868.2	2877.7	2726.8	2581.8	2293.2
68°	897.9	902.7	987.3	1295.0	1748.2	2336.2	2874.1	2888.6	2735.6	2566.3	2246.6
70°	535.2	544.5	619.9	891.6	1329.9	2019.0	2810.3	2843.4	2683.3	2407.5	1943.2
72.5°	136.7	147.8	219.1	399.1	759.6	1422.5	2372.4	2428.4	2329.7	1953.1	1311.8
75°	56.2	59.1	78.3	131.5	283.0	640.9	1563.7	1683.7	1615.1	1169.3	592.9
77.5°	38.9	40.8	50.3	72.9	122.5	217.3	766.6	853.3	768.8	399.1	129.3
80°	27.9	29.6	36.0	48.5	70.4	77.6	249.9	288.9	229.4	87.6	32.1
82.5°	16.7	17.9	26.9	34.6	42.8	37.1	62.2	70.6	66.5	43.5	14.3
85°	8.2	9.7	18.1	24.7	23.1	15.6	19.0	21.1	26.2	26.5	7.7
87.5°	0.5	1.1	10.6	14.9	6.4	3.6	5.6	6.8	9.3	13.1	3.2
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°	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1	450.1
2.5°	451.4	451.5	450.3	449.8	450.1	448.0	447.1	447.4	447.4	448.0	447.1
5°	455.8	455.8	453.7	450.8	449.2	445.1	442.4	441.7	441.2	440.8	440.1
7.5°	465.5	464.4	460.7	454.4	449.0	440.1	433.3	429.7	427.9	427.2	426.7
10°	481.1	479.1	472.9	461.2	448.9	432.9	418.1	407.5	398.7	395.1	393.0
12.5°	502.1	499.2	488.6	469.3	447.6	418.2	386.0	355.0	326.2	314.3	308.4
15°	526.2	522.1	505.5	476.1	440.3	385.1	315.1	260.8	220.8	205.8	199.4
17.5°	550.8	545.4	520.1	480.4	418.2	316.5	221.0	166.9	140.2	133.1	130.6
20°	575.5	567.6	532.9	477.2	368.4	228.2	145.8	122.0	114.3	112.1	111.4
22.5°	599.0	586.8	544.3	464.6	291.8	153.1	115.3	107.8	105.3	104.1	103.7
25°	619.4	602.4	554.4	425.9	206.5	115.7	103.9	101.4	98.2	95.8	96.0
27.5°	638.5	617.9	560.4	362.2	137.7	98.9	96.2	92.8	86.9	83.5	83.5
30°	661.6	638.7	564.9	278.7	101.4	87.4	85.3	80.1	72.0	67.5	67.5
32.5°	696.4	670.2	562.1	195.6	84.0	76.8	71.8	64.7	55.9	51.6	51.4
35°	749.6	719.0	541.6	128.2	74.2	66.8	58.7	50.0	42.3	38.7	38.5
37.5°	821.2	784.2	495.8	91.7	66.5	57.5	47.8	38.2	32.4	30.1	29.9
40°	914.2	859.9	430.2	74.3	59.3	48.5	36.9	29.6	25.6	23.8	24.0
42.5°	1025.8	941.1	351.6	64.1	52.3	39.9	28.8	23.3	20.8	19.5	19.2
45°	1149.7	1021.1	269.2	57.1	45.3	32.2	22.6	18.4	16.5	15.8	15.8
47.5°	1286.0	1099.0	197.0	51.0	37.8	24.9	18.1	15.0	13.4	12.9	12.7
50°	1409.8	1153.1	142.0	44.6	31.0	19.7	14.7	12.5	11.5	10.7	10.7
52.5°	1513.0	1170.2	104.6	37.6	25.1	15.8	12.2	10.7	9.7	9.1	9.1
55°	1603.8	1163.2	77.7	31.0	20.2	12.9	10.4	9.1	8.2	7.7	7.7
57.5°	1690.8	1140.6	58.0	25.3	16.3	10.4	8.8	7.7	6.8	6.4	6.4
60°	1761.9	1103.0	43.2	20.4	13.1	8.4	7.3	6.3	5.6	5.0	5.0
62.5°	1819.6	1061.4	31.7	16.8	10.4	6.6	5.7	5.2	4.1	3.6	3.6
65°	1820.0	992.5	23.8	14.0	8.1	5.2	4.3	4.1	2.7	2.1	2.0
67.5°	1688.3	855.6	18.3	12.0	6.3	3.9	3.2	3.4	1.4	0.9	0.7
68°	1640.5	820.9	17.2	11.8	5.9	3.8	3.0	3.4	1.3	0.7	0.5
70°	1383.1	653.1	13.8	11.5	5.2	2.9	2.5	3.4	1.1	0.5	0.4
72.5°	884.6	379.0	10.2	9.1	3.9	2.1	1.6	3.0	1.1	0.4	0.2
75°	376.5	117.5	7.0	6.4	2.3	1.6	1.1	2.0	0.7	0.2	0.0
77.5°	79.3	26.5	4.1	3.9	1.6	1.1	0.7	0.5	0.2	0.0	0.0
80°	20.4	7.7	2.1	2.0	0.9	0.5	0.4	0.0	0.0	0.0	0.0
82.5°	6.4	3.0	1.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.2	1.8	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.5	0.2	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)