

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: P397806

Luminaire Tested: **ARCH-S-PA1-40-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397806
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-PA1-40-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 500mA 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: 3757 lumens
Efficiency: N/A
Efficacy: 93.9 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

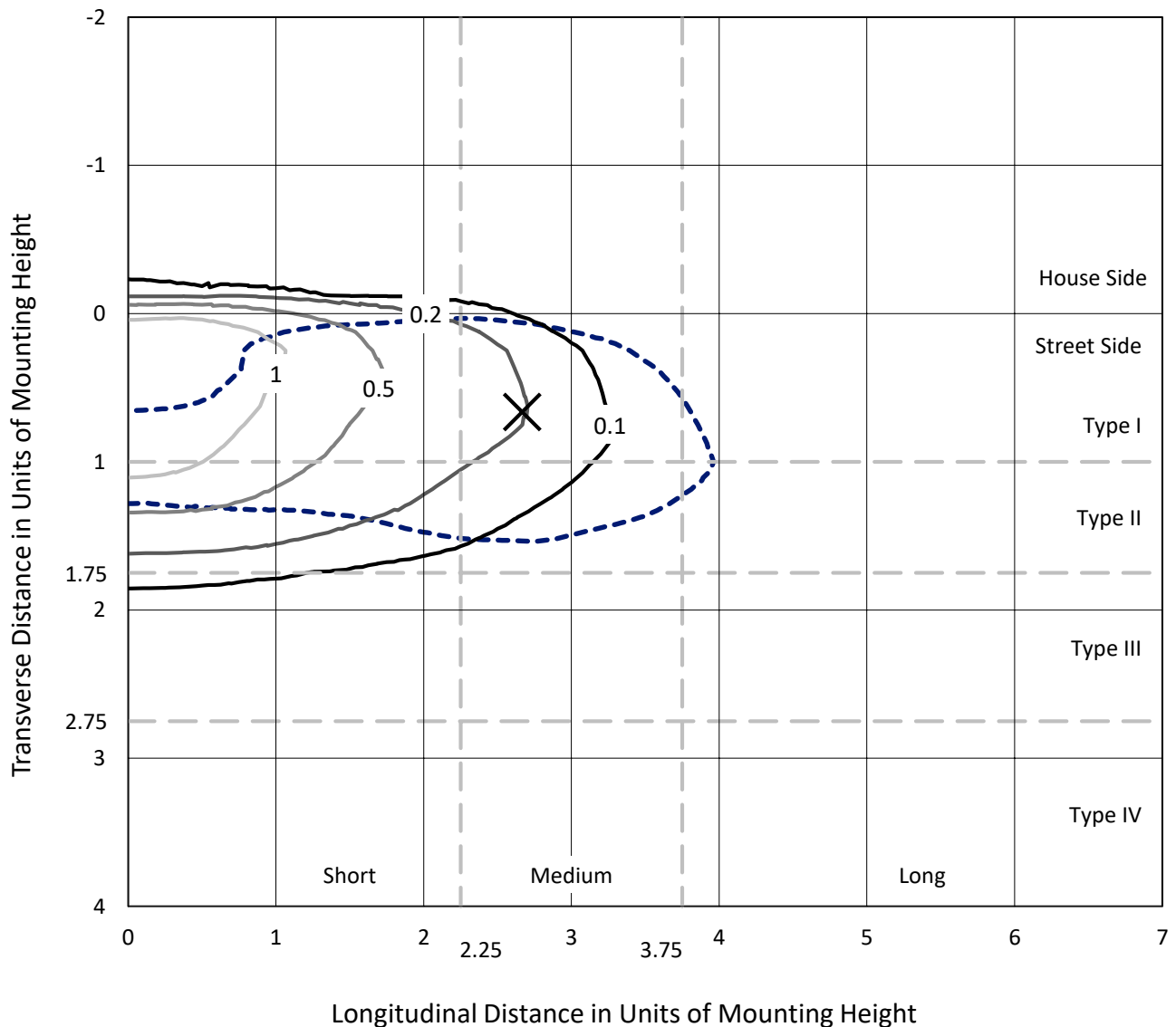
Input Watts (W): 40
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P397806
 CATALOG NUMBER: ARCH-S-PA1-40-830-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

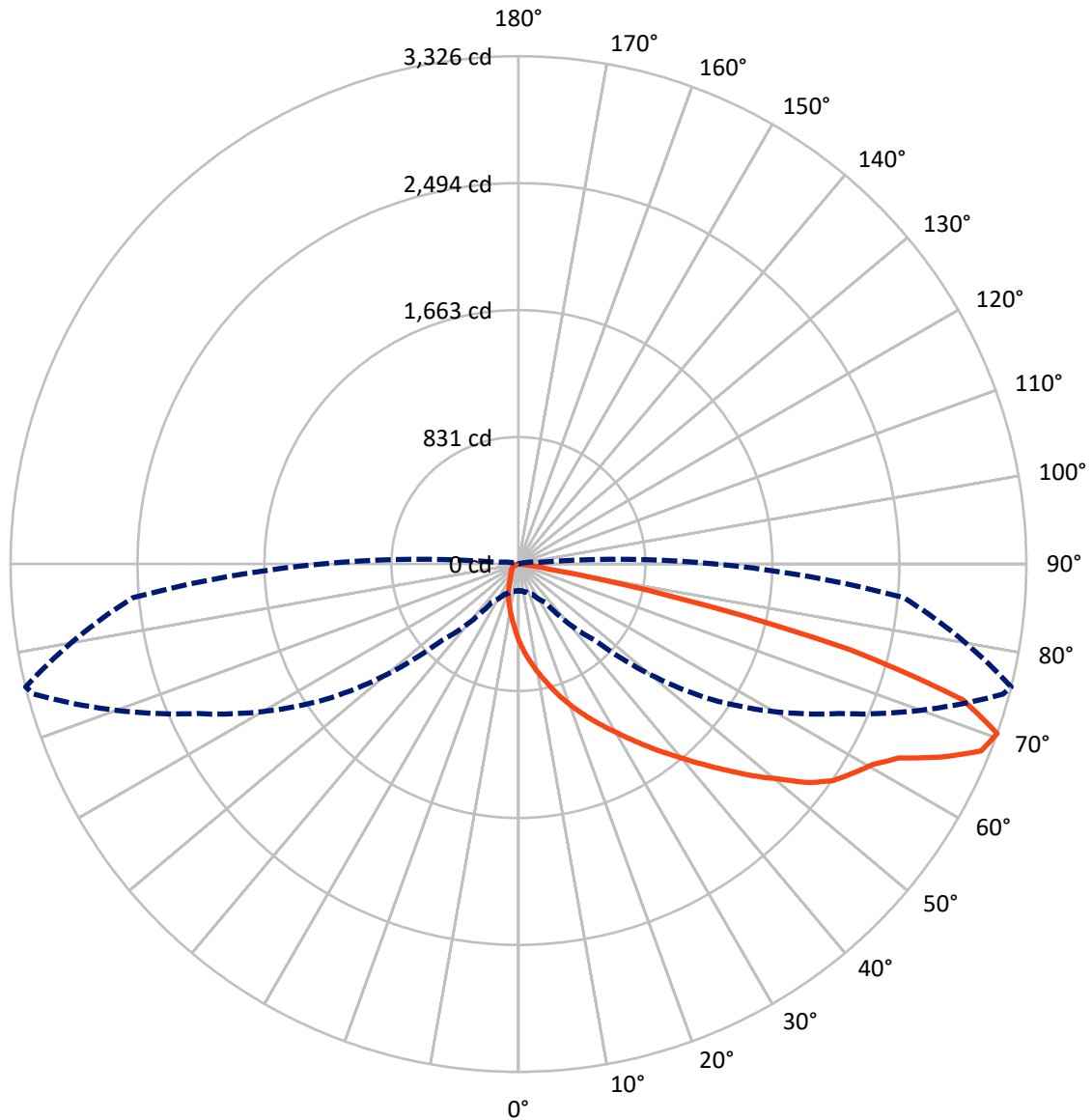
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P397806
CATALOG NUMBER: ARCH-S-PA1-40-830-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P397806

CATALOG NUMBER: ARCH-S-PA1-40-830-U-T2R-HSS

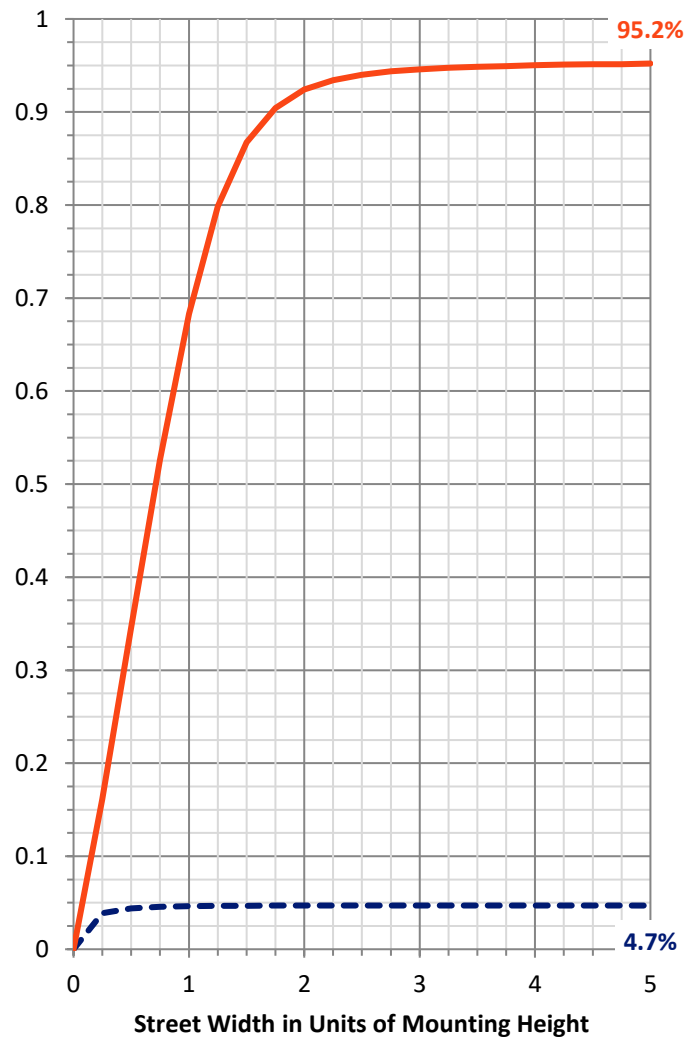
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	177.2	0.0	177.2
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	3579.8	0.0	3579.8
	% Fixture	95.3	0.0	95.3
Total	Lumens	3757.0	0.0	3757.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	1.3
10°-20°	152.9	4.1
20°-30°	284.8	7.6
30°-40°	503.7	13.4
40°-50°	770.3	20.5
50°-60°	873.3	23.2
60°-70°	748.6	19.9
70°-80°	362.6	9.7
80°-90°	13.5	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°	3757.0	100.0
0°-180°	3757.0	100.0

Coefficient of Utilization



--- HS — SS

REPORT NUMBER: P397806

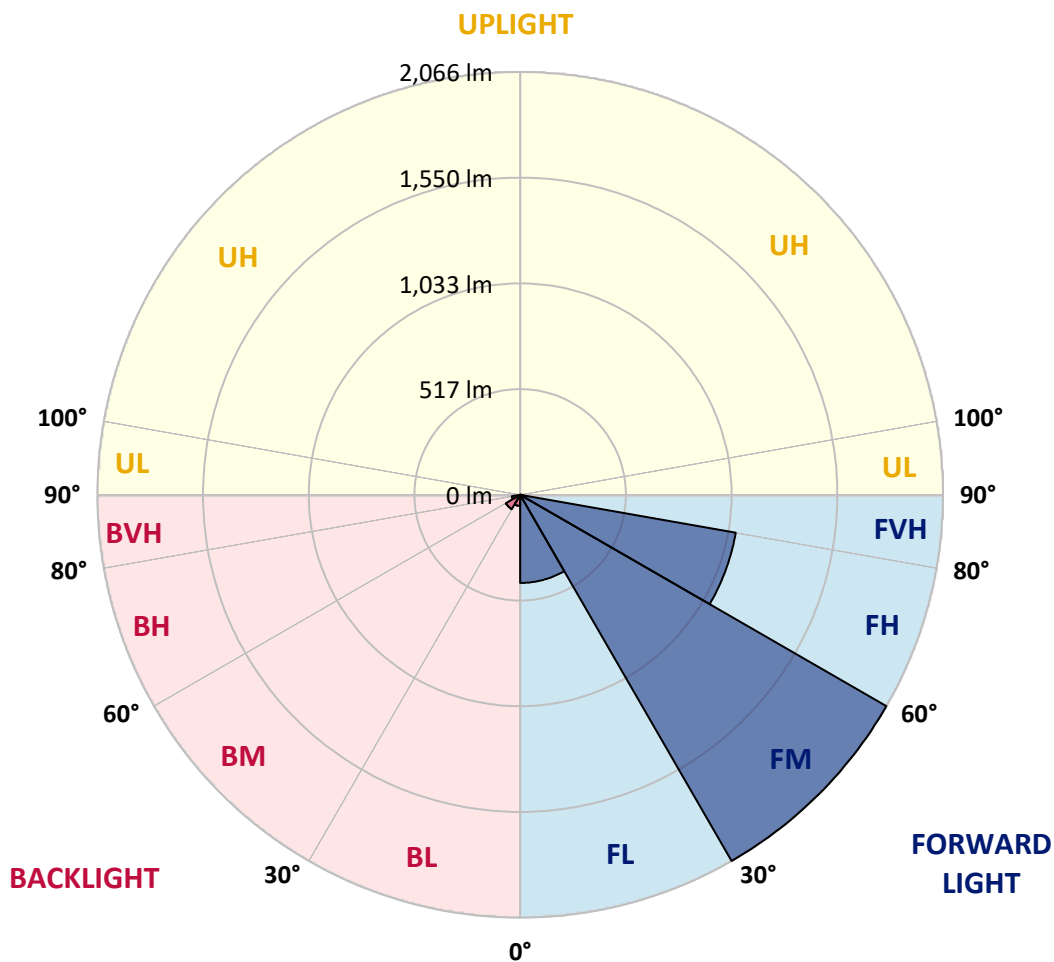
CATALOG NUMBER: ARCH-S-PA1-40-830-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	430.7	11.5			
FM	(30°-60°)	2066.4	55.0			
FH	(60°-80°)	1069.5	28.5			G1/1800
FVH	(80°-90°)	13.2	0.4			G1/100
BL	(0°-30°)	54.4	1.4	B0/110		
BM	(30°-60°)	80.9	2.2	B0/220		
BH	(60°-80°)	41.7	1.1	B0/110		G0/110
BVH	(80°-90°)	0.2	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





REPORT NUMBER: P397806

CATALOG NUMBER: ARCH-S-PA1-40-830-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9
2.5°	687.4	683.7	679.9	665.5	652.4	640.5	618.0	588.6	562.3	556.7	526.0
5°	807.5	803.1	797.5	783.1	766.2	746.2	713.1	668.0	621.7	611.7	554.8
7.5°	888.8	885.1	876.9	870.1	853.2	833.8	796.9	744.3	680.5	668.0	588.0
10°	944.5	942.0	940.7	935.1	922.6	907.0	870.1	815.0	740.0	725.6	623.0
12.5°	964.5	964.5	970.8	980.2	982.0	977.0	943.2	888.2	802.5	787.5	664.3
15°	937.6	940.7	954.5	984.5	1015.8	1036.4	1015.2	963.9	871.3	855.1	713.1
17.5°	930.1	933.2	942.6	968.9	1010.8	1065.8	1076.5	1037.1	936.4	922.6	763.1
20°	951.4	954.5	962.6	985.2	1017.1	1072.7	1117.1	1107.8	1005.2	990.8	813.8
22.5°	1002.0	1003.9	1003.9	1021.4	1049.6	1090.9	1142.8	1174.7	1075.9	1060.2	863.8
25°	1110.9	1107.1	1092.1	1083.4	1101.5	1135.3	1175.3	1233.5	1154.7	1133.4	917.6
27.5°	1253.5	1266.0	1229.7	1187.8	1174.1	1193.4	1221.0	1285.4	1231.0	1208.5	966.4
30°	1446.8	1441.8	1394.2	1334.2	1274.8	1267.9	1277.3	1329.8	1307.3	1286.0	1020.8
32.5°	1605.6	1615.0	1565.0	1491.8	1403.0	1361.1	1351.1	1383.0	1388.6	1374.8	1085.2
35°	1768.9	1778.9	1730.1	1648.8	1543.1	1473.0	1444.3	1448.6	1489.3	1471.8	1152.8
37.5°	1915.3	1924.0	1875.9	1792.7	1687.0	1601.3	1560.0	1526.2	1586.9	1571.2	1224.1
40°	2026.6	2027.9	1995.3	1920.9	1820.8	1732.0	1685.1	1618.8	1690.1	1679.5	1298.5
42.5°	2105.4	2107.9	2084.2	2020.4	1927.8	1845.2	1807.1	1728.2	1808.9	1799.6	1384.8
45°	2142.3	2146.7	2144.2	2085.4	2008.5	1937.2	1924.7	1844.6	1939.0	1930.3	1484.3
47.5°	2107.3	2107.3	2139.2	2131.1	2060.4	2012.8	2027.2	1965.9	2080.4	2072.3	1585.6
50°	1961.6	1963.4	2028.5	2121.7	2080.4	2069.8	2114.8	2084.8	2208.6	2213.6	1707.0
52.5°	1578.8	1575.6	1795.2	1974.1	2066.6	2095.4	2195.5	2206.1	2362.5	2377.5	1827.7
55°	1179.7	1177.8	1388.0	1712.6	1970.3	2082.3	2240.5	2314.3	2493.9	2503.2	1917.8
57.5°	933.9	928.9	1044.6	1380.5	1752.6	2023.5	2242.4	2335.0	2567.0	2583.3	2005.3
60°	718.1	713.7	800.0	1027.1	1444.3	1867.1	2188.6	2336.2	2637.7	2666.5	2122.9
62.5°	513.5	518.5	584.8	736.8	1110.9	1646.3	2118.6	2353.7	2763.4	2796.0	2289.9
65°	346.5	344.0	399.1	501.6	790.0	1349.2	2011.0	2390.6	2989.9	3046.8	2490.1
67.5°	240.8	242.7	267.7	326.5	501.6	1035.8	1832.1	2411.3	3223.8	3268.2	2630.2
70°	173.9	176.4	190.2	219.5	306.5	702.4	1548.7	2316.8	3287.0	3325.8	2532.6
72.5°	114.5	119.5	140.1	155.7	195.8	439.7	1140.9	1996.0	3014.9	3043.7	2124.8
75°	61.9	63.2	90.1	116.3	139.5	274.0	680.5	1346.1	2255.5	2246.2	1401.1
77.5°	48.2	50.0	55.7	83.2	93.8	150.7	269.0	608.0	1068.3	1039.6	477.9
80°	29.4	30.6	38.8	49.4	65.7	87.6	78.8	165.1	217.0	203.3	70.1
82.5°	17.5	18.8	23.1	41.3	51.9	41.3	27.5	40.0	40.7	40.0	17.5
85°	3.1	3.1	16.3	28.8	27.5	11.9	16.3	13.1	11.9	12.5	3.8
87.5°	0.0	0.0	6.3	8.8	12.5	4.4	6.3	3.1	3.1	3.1	1.9
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: P397806

CATALOG NUMBER: ARCH-S-PA1-40-830-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9	502.9
2.5°	507.3	486.0	442.2	404.1	365.9	337.8	316.5	294.6	287.1	277.7	272.7
5°	516.0	474.1	387.2	317.8	259.0	213.9	185.1	167.6	156.4	148.2	146.4
7.5°	529.2	464.7	342.8	248.9	184.5	139.5	115.7	103.8	97.6	93.8	92.6
10°	544.8	456.6	299.0	193.9	130.1	98.2	85.1	80.1	77.6	76.3	75.7
12.5°	566.7	453.5	262.1	149.5	98.2	80.7	73.8	70.7	68.8	66.9	66.3
15°	595.5	454.7	228.3	115.7	81.3	71.9	66.3	63.2	60.7	58.8	58.8
17.5°	625.5	456.6	195.2	93.8	73.8	65.7	59.4	55.0	53.2	51.3	50.7
20°	653.6	456.0	163.3	80.1	66.9	58.8	52.5	48.2	45.0	43.2	43.2
22.5°	680.5	452.2	133.2	71.9	61.3	51.9	45.0	40.7	38.2	36.3	36.3
25°	709.3	444.7	108.8	65.7	54.4	45.7	38.8	34.4	32.5	30.6	30.6
27.5°	731.8	432.2	88.8	60.0	48.2	39.4	33.2	29.4	27.5	26.3	26.3
30°	756.2	414.1	73.8	53.8	41.9	33.8	28.1	25.0	23.1	22.5	22.5
32.5°	783.1	394.1	63.2	47.5	35.7	28.8	23.8	21.9	20.0	19.4	19.4
35°	814.4	376.5	56.9	41.3	31.3	24.4	20.6	18.8	17.5	17.5	17.5
37.5°	850.0	358.4	51.3	36.3	26.9	20.6	17.5	16.9	16.3	15.6	15.6
40°	888.8	339.0	46.3	31.9	23.1	17.5	15.0	15.0	14.4	14.4	14.4
42.5°	932.6	322.1	41.9	28.1	20.0	15.0	13.1	13.1	12.5	12.5	12.5
45°	980.2	306.5	38.2	25.0	17.5	13.1	11.9	11.3	10.6	10.6	10.6
47.5°	1036.4	297.7	35.0	21.9	15.0	11.3	10.0	9.4	8.8	8.1	8.1
50°	1108.4	301.5	31.9	18.1	13.1	9.4	8.1	7.5	6.9	6.3	6.3
52.5°	1165.3	299.6	27.5	15.6	10.6	7.5	6.3	5.6	5.0	4.4	4.4
55°	1206.6	292.1	23.8	13.1	8.1	6.3	5.0	3.8	3.1	3.1	3.1
57.5°	1247.2	284.6	20.0	10.6	6.3	4.4	3.1	2.5	2.5	2.5	2.5
60°	1310.4	274.0	17.5	8.8	5.0	3.1	1.9	1.9	1.3	1.3	1.3
62.5°	1387.3	260.8	14.4	7.5	3.8	2.5	1.3	1.3	0.0	0.0	0.0
65°	1471.8	237.7	11.9	5.6	3.1	1.9	1.3	0.0	0.0	0.0	0.0
67.5°	1452.4	190.8	10.0	3.8	2.5	1.3	0.6	0.0	0.0	0.0	0.0
70°	1284.8	128.9	8.1	3.1	1.9	1.3	0.6	0.0	0.0	0.0	0.0
72.5°	1006.4	76.3	5.6	2.5	1.3	0.6	0.0	0.0	0.0	0.0	0.0
75°	644.3	38.2	3.8	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	215.8	18.8	2.5	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	30.6	6.3	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.9	2.5	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.5	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	0.6	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)