

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: P397810

Luminaire Tested: **ARCH-S-PA1-40-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
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-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3479 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 40
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

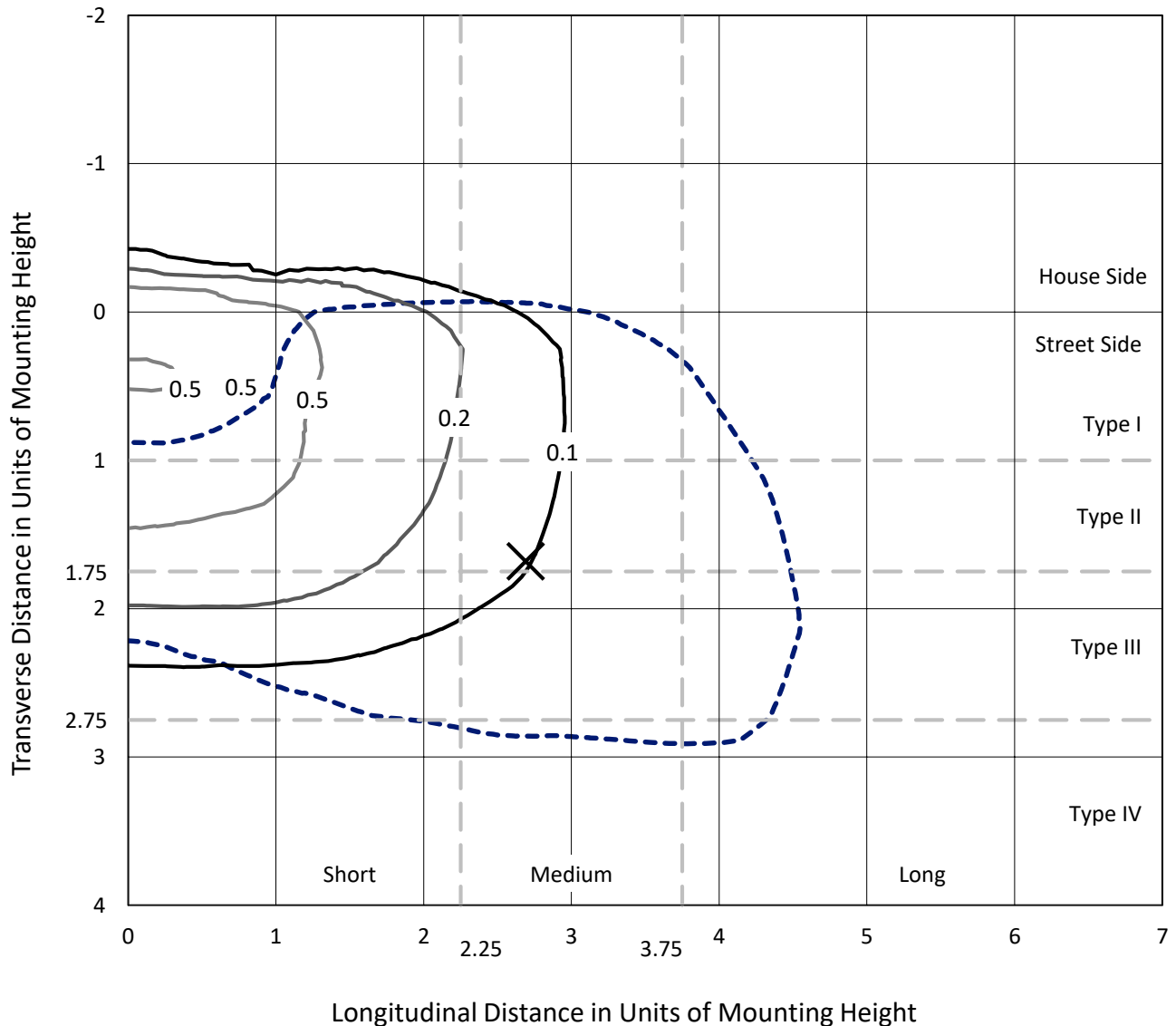




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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

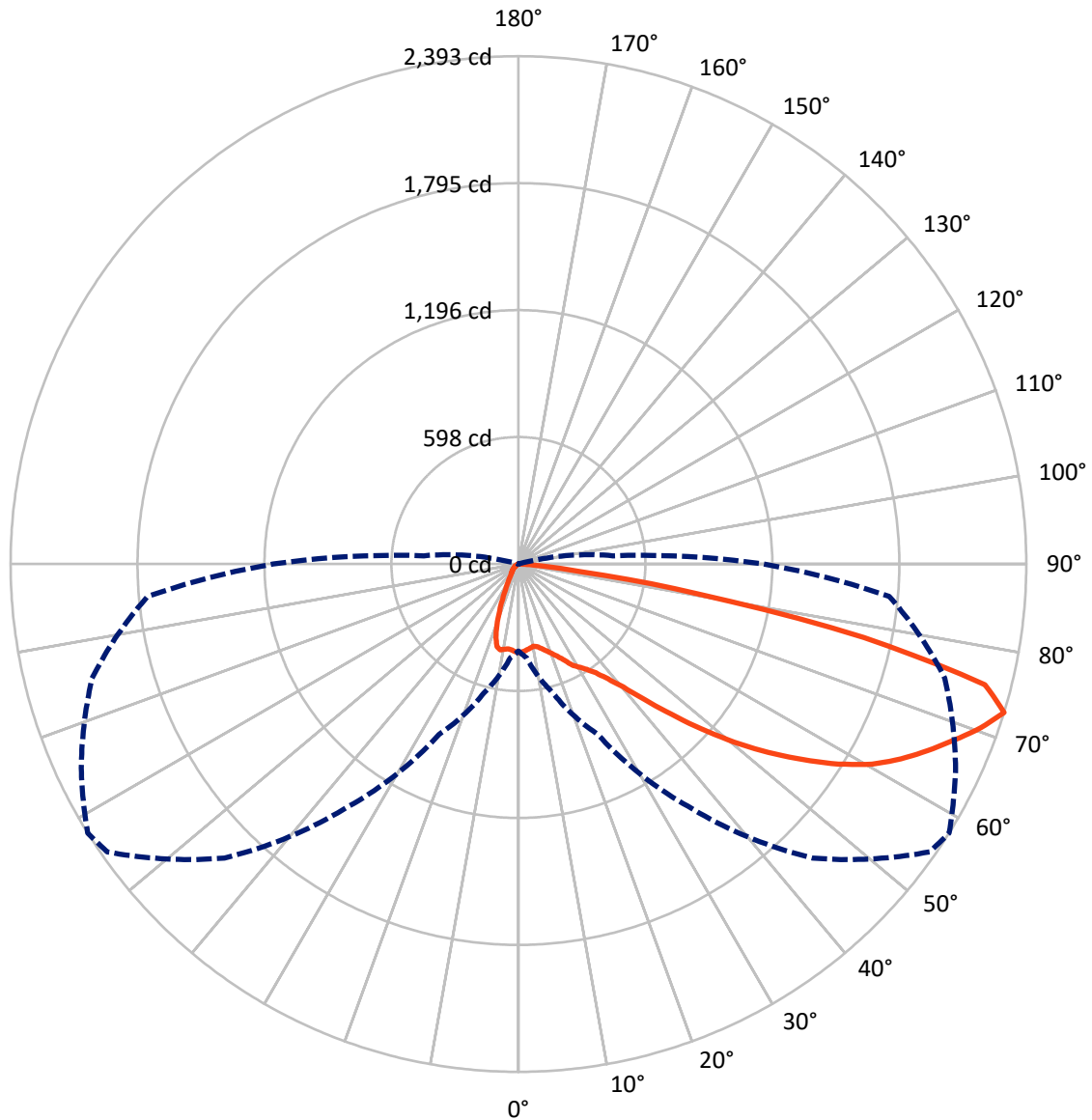


Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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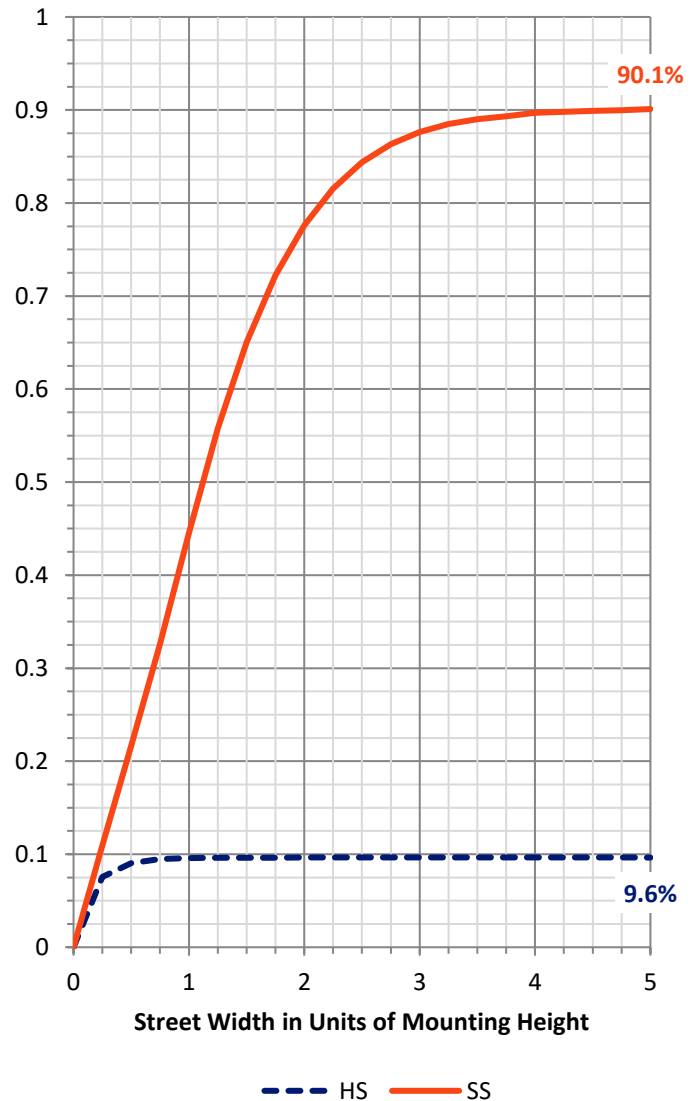
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	338.3	0.0	338.3
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	3140.7	0.0	3140.7
	% Fixture	90.3	0.0	90.3
Total	Lumens	3479.0	0.0	3479.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.3	1.1
10°-20°	99.8	2.9
20°-30°	156.8	4.5
30°-40°	270.3	7.8
40°-50°	514.4	14.8
50°-60°	814.6	23.4
60°-70°	950.5	27.3
70°-80°	595.3	17.1
80°-90°	39.1	1.1
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°	3479.0	100.0
0°-180°	3479.0	100.0

Coefficient of Utilization



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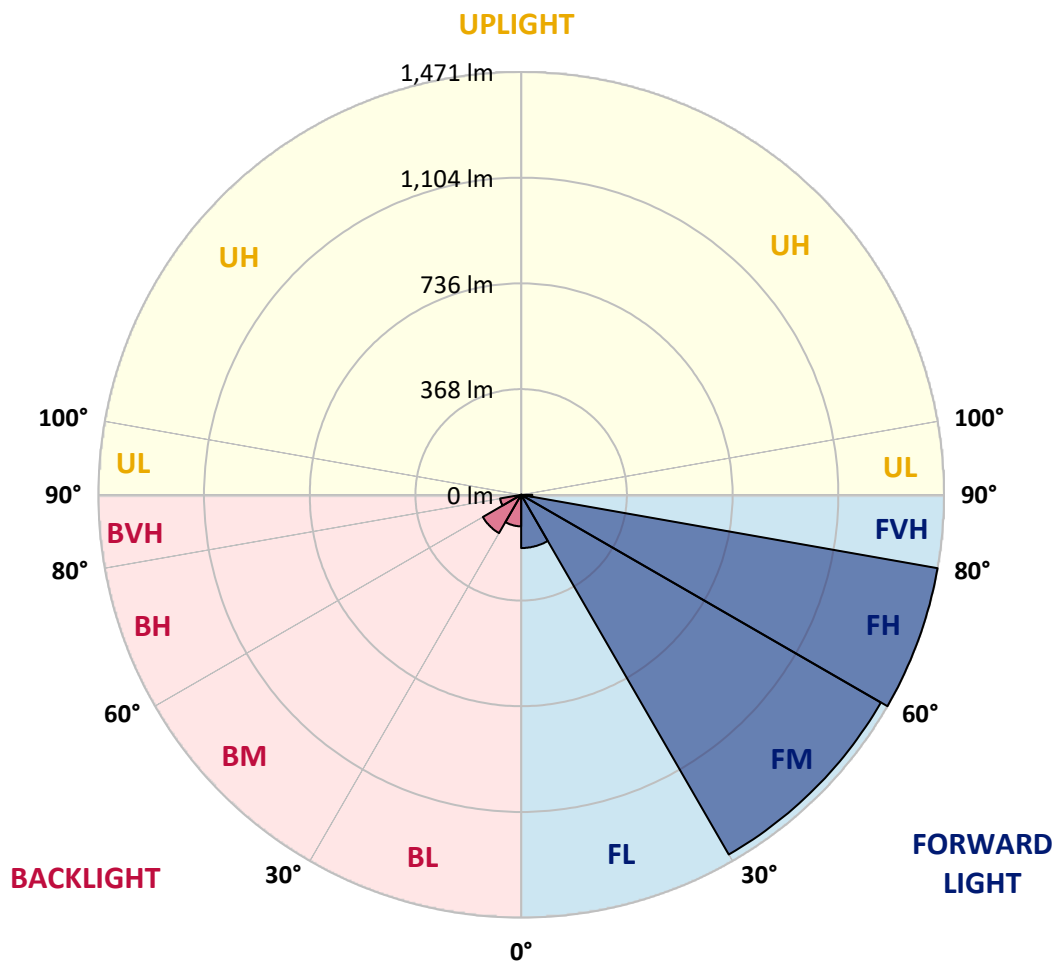
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	185.3	5.3			
FM	(30°-60°)	1445.3	41.5			
FH	(60°-80°)	1471.4	42.3			G1/1800
FVH	(80°-90°)	38.7	1.1			G1/100
BL	(0°-30°)	109.6	3.1	B0/110		
BM	(30°-60°)	153.9	4.4	B0/220		
BH	(60°-80°)	74.4	2.1	B0/110		G0/110
BVH	(80°-90°)	0.4	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5
2.5°	415.6	413.7	413.1	412.5	413.1	413.7	411.9	413.7	412.5	413.1	414.3
5°	400.7	398.8	398.2	398.8	400.7	403.8	405.0	406.9	406.9	408.7	409.4
7.5°	383.9	382.6	382.0	383.2	387.0	393.8	397.6	400.0	402.5	406.3	410.0
10°	374.5	373.9	373.3	375.2	378.9	385.1	390.1	393.8	403.1	413.7	420.6
12.5°	368.3	368.3	369.6	373.3	378.3	383.2	395.1	400.0	414.3	430.5	439.9
15°	363.3	363.3	365.2	372.0	378.9	390.7	408.1	413.7	430.5	450.4	462.9
17.5°	359.6	360.8	362.1	368.9	382.0	401.9	422.4	430.5	451.1	472.8	486.5
20°	360.2	361.5	362.1	368.9	387.6	415.0	441.1	450.4	474.1	497.1	510.8
22.5°	364.0	365.8	366.4	375.8	397.6	428.7	462.3	472.8	498.3	522.6	533.2
25°	379.5	380.8	377.0	385.1	411.9	449.8	489.6	500.8	526.3	548.7	557.4
27.5°	432.4	433.6	413.1	403.8	423.1	467.2	523.2	538.8	570.5	585.4	586.7
30°	546.9	548.1	507.7	463.5	449.8	482.2	541.9	563.7	604.7	621.5	614.1
32.5°	694.3	693.1	637.7	572.4	513.3	508.3	568.6	591.7	636.5	652.6	647.0
35°	842.4	844.2	797.0	698.7	614.1	557.4	602.9	629.6	683.7	706.8	696.8
37.5°	943.8	956.2	935.7	829.3	737.9	648.3	658.2	686.8	754.7	785.8	764.6
40°	1086.9	1083.8	1034.0	955.6	874.7	782.7	747.8	761.5	839.3	881.0	848.0
42.5°	1279.1	1272.9	1188.3	1111.8	1021.6	946.3	875.4	872.9	936.3	984.9	936.9
45°	1453.3	1444.0	1386.1	1312.1	1213.2	1126.7	1030.9	1009.1	1053.3	1094.4	1038.4
47.5°	1592.1	1576.5	1535.5	1496.3	1472.0	1337.6	1193.9	1160.9	1183.3	1213.8	1134.8
50°	1756.3	1713.4	1653.7	1630.0	1680.4	1576.5	1350.7	1318.9	1317.7	1335.1	1234.3
52.5°	1831.0	1753.2	1719.6	1739.5	1828.5	1798.6	1519.9	1474.5	1456.4	1458.3	1327.0
55°	1740.8	1732.0	1750.1	1812.3	1928.6	1911.2	1682.3	1626.3	1599.5	1565.9	1416.0
57.5°	1638.1	1664.9	1736.4	1855.2	2055.6	2028.8	1842.2	1778.7	1729.6	1652.4	1514.9
60°	1543.5	1570.9	1689.1	1865.2	2125.2	2142.0	1975.3	1915.0	1842.2	1740.8	1623.8
62.5°	1399.8	1421.0	1587.1	1850.9	2094.8	2208.0	2068.0	2022.6	1954.8	1824.7	1748.8
65°	1238.1	1251.8	1416.0	1736.4	2035.0	2200.5	2144.5	2119.0	2053.1	1912.5	1872.7
67.5°	1060.8	1076.9	1213.8	1530.5	1918.1	2165.7	2216.7	2214.2	2138.9	2009.5	1962.2
70°	856.7	857.9	971.2	1269.2	1714.0	2096.0	2306.3	2311.9	2221.1	2082.3	1966.0
72.5°	410.0	443.6	629.6	885.9	1393.0	1959.1	2364.8	2392.8	2272.7	2079.8	1753.8
75°	93.9	97.1	183.5	421.2	816.9	1503.7	2218.6	2270.8	2147.0	1798.6	1235.6
77.5°	34.2	36.1	51.6	123.2	314.2	777.1	1587.7	1664.2	1587.1	1162.8	584.2
80°	23.0	22.4	26.8	54.7	144.3	220.2	811.9	857.3	782.7	396.9	140.0
82.5°	11.8	12.4	18.7	30.5	97.1	76.5	271.3	294.9	242.6	79.6	26.1
85°	5.6	5.6	10.6	19.3	41.1	26.8	60.3	72.8	65.3	34.8	8.7
87.5°	5.6	5.6	10.0	12.4	21.2	11.2	14.9	18.7	17.4	18.7	3.1
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°	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5	417.5
2.5°	414.3	413.7	413.1	414.3	413.7	415.0	415.0	416.2	416.2	415.0	414.3
5°	408.7	407.5	406.3	406.3	405.6	406.9	410.6	413.7	414.3	412.5	411.9
7.5°	409.4	409.4	408.1	405.6	401.3	401.3	401.3	405.0	406.9	405.6	405.0
10°	420.6	421.2	418.1	412.5	405.0	398.2	385.1	365.8	347.8	342.8	340.9
12.5°	439.9	440.5	434.3	424.3	408.7	368.3	318.5	272.5	237.0	227.1	225.2
15°	462.9	463.5	452.3	436.1	388.8	294.9	220.9	168.6	137.5	130.0	129.4
17.5°	486.5	485.3	468.5	437.4	329.7	209.0	134.4	107.6	99.5	97.7	98.3
20°	509.5	505.8	482.8	414.3	253.8	136.9	98.3	92.1	90.2	89.0	89.0
22.5°	530.7	523.2	494.6	368.9	177.9	98.3	87.7	86.5	84.0	82.1	81.5
25°	551.8	541.3	502.1	309.8	119.5	85.9	82.7	80.3	77.1	74.7	74.0
27.5°	577.3	562.4	498.3	235.2	89.6	79.6	77.1	73.4	69.1	65.3	64.1
30°	601.6	584.8	477.2	162.4	76.5	73.4	69.7	64.1	58.5	54.1	52.9
32.5°	632.1	612.8	439.2	106.4	66.6	64.1	60.3	53.5	46.0	41.1	39.8
35°	675.6	653.9	390.7	74.7	58.5	54.1	49.1	41.7	33.6	29.9	29.2
37.5°	736.6	707.4	329.7	60.3	51.6	45.4	38.0	30.5	24.9	21.8	21.2
40°	811.3	766.5	261.9	53.5	46.0	38.0	28.6	21.8	18.0	15.6	15.6
42.5°	892.2	821.9	192.9	49.1	40.4	31.1	21.2	15.6	13.1	11.8	11.2
45°	975.5	871.0	130.0	45.4	35.5	23.6	14.9	10.6	8.7	8.7	8.1
47.5°	1062.0	904.0	84.0	41.1	29.9	17.4	10.0	7.5	6.2	6.2	6.2
50°	1147.9	921.4	59.7	37.3	24.3	11.8	7.5	5.6	5.0	5.0	5.0
52.5°	1210.1	910.2	47.9	32.4	18.7	8.7	5.6	4.4	3.7	3.7	3.7
55°	1264.2	890.9	41.7	28.0	13.7	6.2	4.4	3.7	3.1	3.1	3.1
57.5°	1319.6	866.0	37.3	23.6	10.0	4.4	3.1	2.5	2.5	2.5	2.5
60°	1370.0	823.7	32.4	18.7	6.8	3.1	2.5	1.9	1.9	1.9	1.9
62.5°	1419.1	787.6	28.0	14.3	5.0	2.5	1.2	1.2	0.6	0.6	0.6
65°	1447.1	739.1	22.4	9.3	3.1	1.9	0.6	0.6	0.0	0.0	0.0
67.5°	1438.4	681.2	15.6	5.6	1.9	1.2	0.6	0.0	0.0	0.0	0.0
70°	1378.0	603.5	9.3	3.1	1.9	1.2	0.6	0.0	0.0	0.0	0.0
72.5°	1154.1	446.7	5.6	2.5	1.2	0.6	0.0	0.0	0.0	0.0	0.0
75°	770.8	205.3	3.1	1.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0
77.5°	352.8	61.6	1.9	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	70.9	16.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.9	3.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	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)