

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: P214785

Luminaire Tested: **ARCH-AF24-40-D-U-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214785
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-40-D-U-T3-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 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: 3261 lumens
Efficiency: N/A
Efficacy: 81.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-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

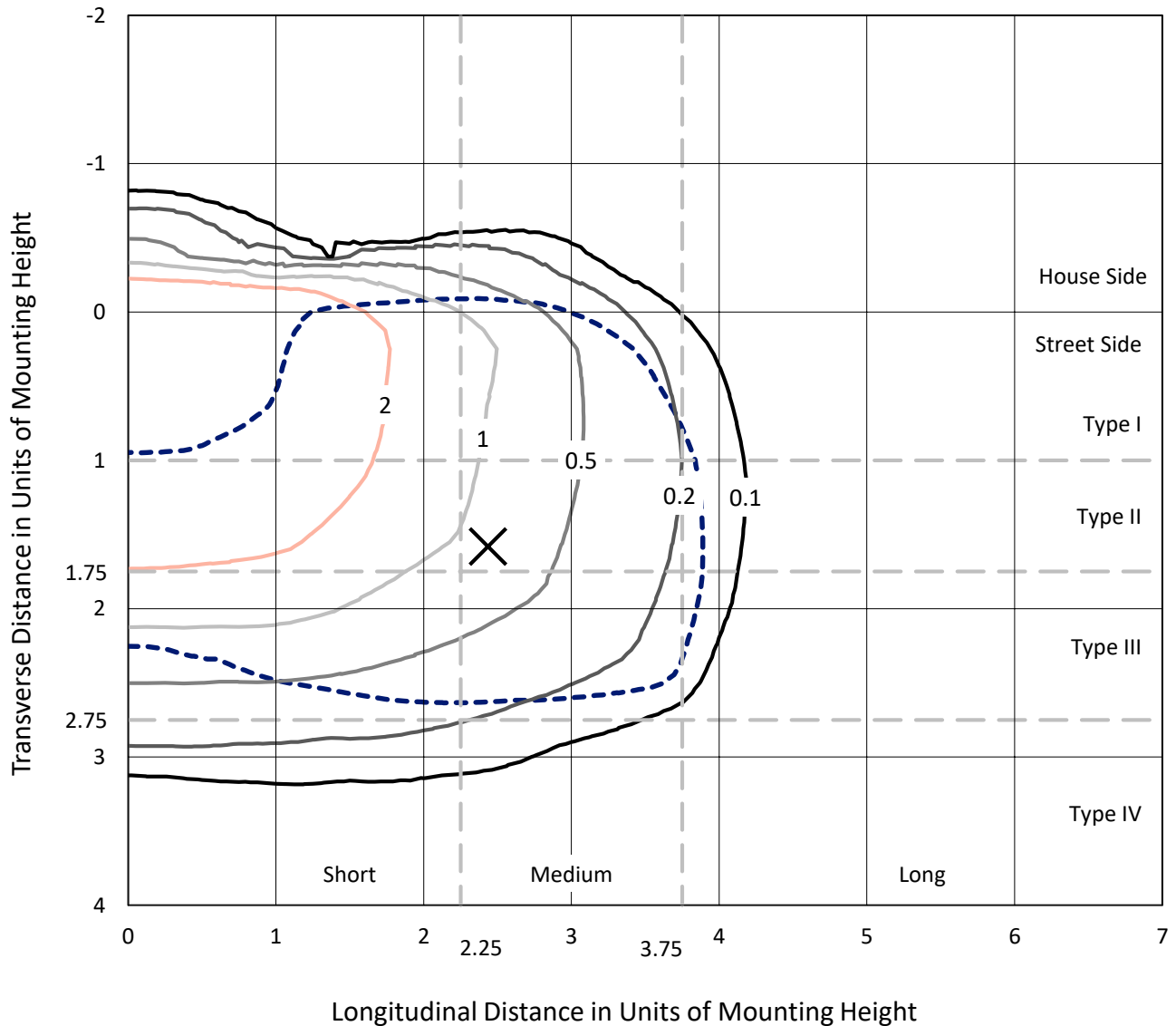


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

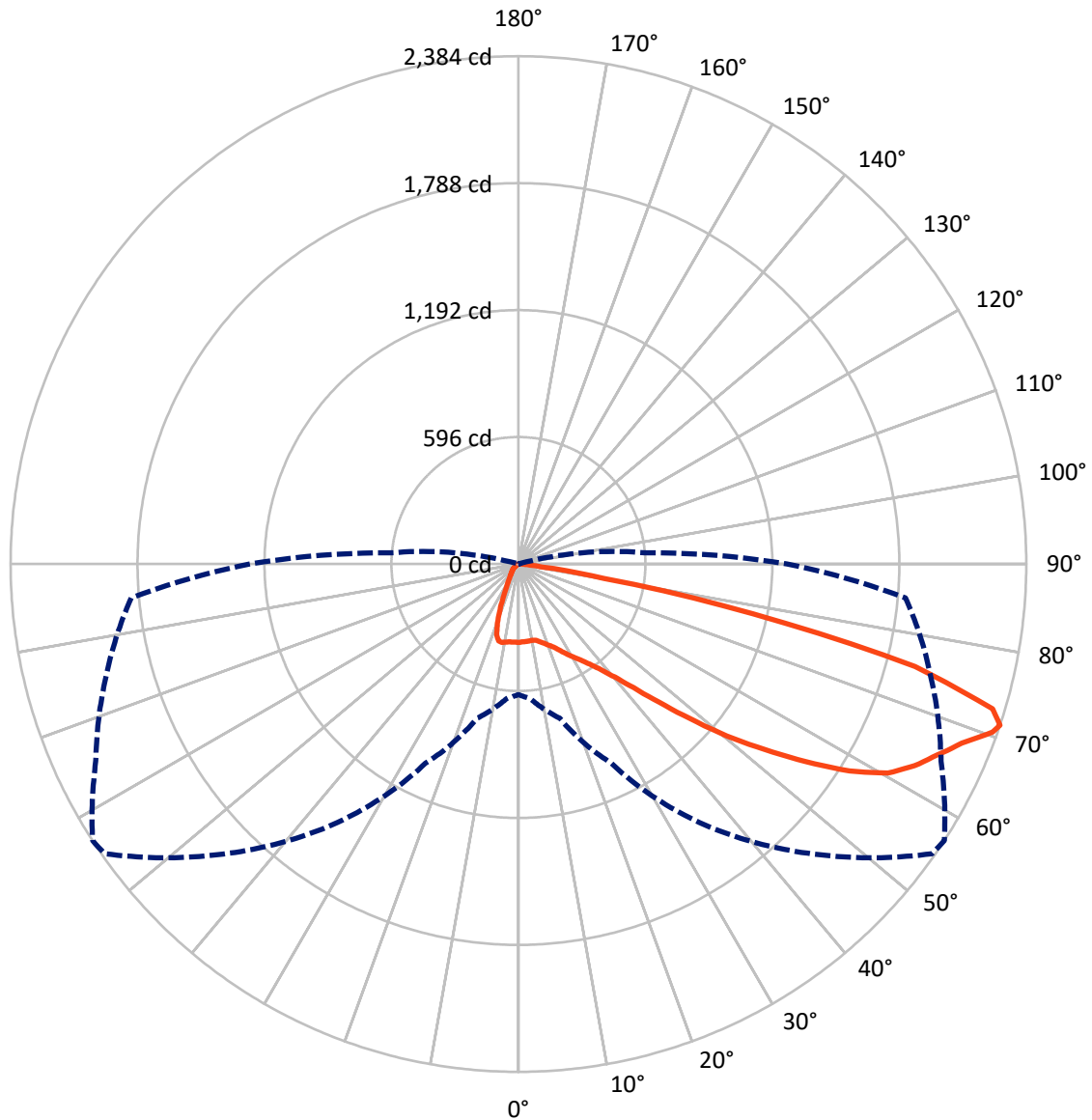


Based on 10 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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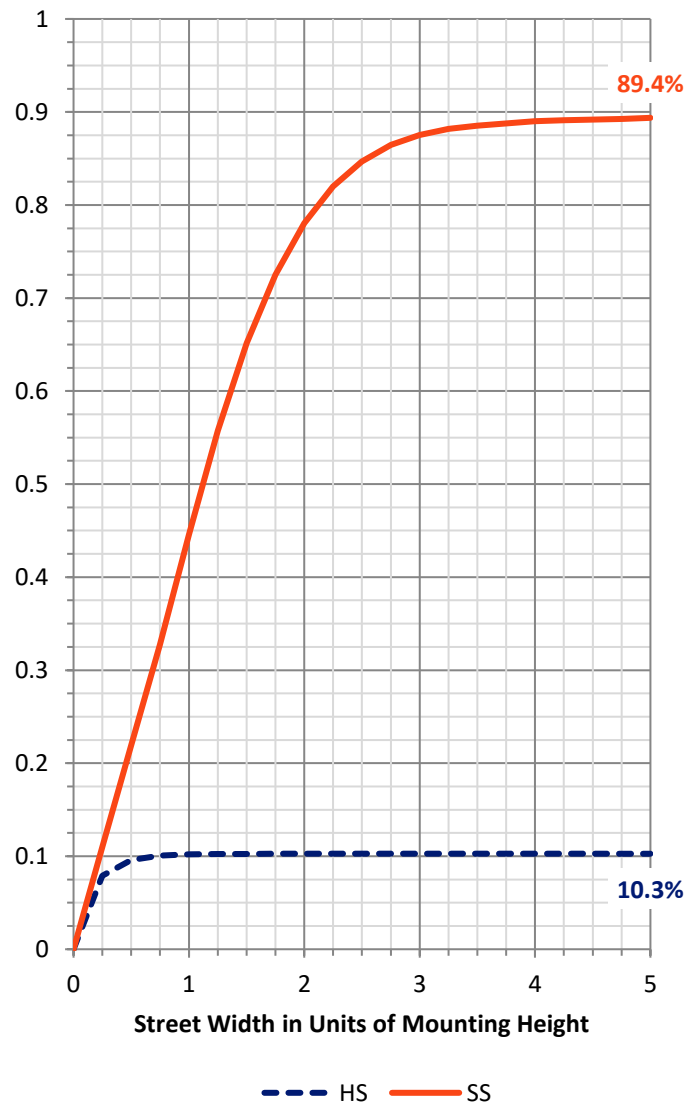
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	337.9	0.0	337.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	2923.1	0.0	2923.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	3261.0	0.0	3261.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.6	1.1
10°-20°	92.5	2.8
20°-30°	144.4	4.4
30°-40°	244.0	7.5
40°-50°	473.9	14.5
50°-60°	795.8	24.4
60°-70°	949.8	29.1
70°-80°	500.5	15.3
80°-90°	25.4	0.8
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°	3261.0	100.0
0°-180°	3261.0	100.0

Coefficient of Utilization



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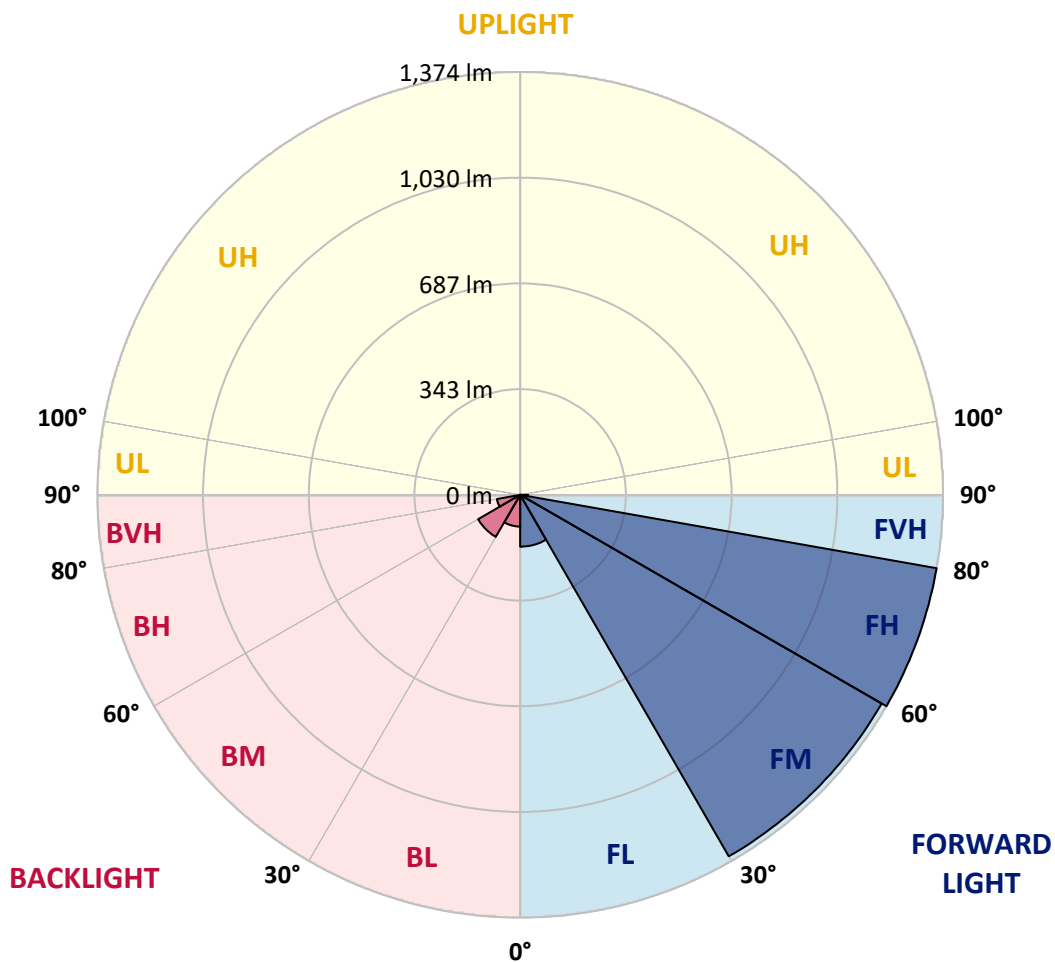
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	168.4	5.2			
FM	(30°-60°)	1356.0	41.6			
FH	(60°-80°)	1373.6	42.1			G1/1800
FVH	(80°-90°)	25.2	0.8			G1/100
BL	(0°-30°)	103.2	3.2	B0/110		
BM	(30°-60°)	157.8	4.8	B0/220		
BH	(60°-80°)	76.7	2.4	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5
2.5°	363.2	363.2	363.2	364.0	364.7	364.7	366.3	365.5	365.5	365.5	367.0
5°	353.3	354.1	354.9	356.4	359.4	361.7	365.5	365.5	366.3	367.8	368.5
7.5°	339.7	340.4	342.7	345.7	351.8	357.1	363.2	364.7	367.0	370.8	372.3
10°	331.3	332.8	335.9	339.7	346.5	353.3	360.9	363.2	370.1	376.9	380.7
12.5°	329.0	329.8	332.8	338.9	347.3	355.6	365.5	367.8	377.7	388.3	394.4
15°	332.8	333.6	335.1	341.9	351.8	362.5	375.4	378.4	390.6	402.7	410.3
17.5°	339.7	339.7	341.2	347.3	357.9	370.1	386.8	391.3	405.0	418.7	427.1
20°	344.2	344.2	346.5	352.6	364.7	380.7	400.5	406.5	421.7	436.9	444.5
22.5°	348.8	349.5	351.8	358.7	372.3	394.4	417.2	423.3	440.7	456.7	464.3
25°	361.7	360.9	361.7	367.8	383.7	411.1	440.0	447.6	465.8	483.3	487.1
27.5°	397.4	395.9	386.0	382.2	394.4	428.6	468.8	476.4	497.7	515.2	515.2
30°	479.5	476.4	452.1	421.0	411.1	444.5	496.2	506.8	534.2	549.4	544.8
32.5°	583.6	576.7	545.6	492.4	452.9	465.8	525.1	537.2	572.2	585.1	575.2
35°	697.6	696.8	658.1	589.7	533.4	509.9	562.3	576.7	620.8	632.2	616.3
37.5°	818.4	821.4	795.6	701.4	635.3	582.1	611.7	628.4	682.4	696.1	680.9
40°	952.9	952.1	942.3	830.6	757.6	684.7	683.1	698.3	763.7	785.0	763.7
42.5°	1123.1	1121.6	1085.9	985.6	905.8	818.4	787.2	792.6	865.5	900.5	869.3
45°	1296.4	1285.7	1244.7	1158.1	1087.4	984.0	924.8	924.8	987.1	1035.0	986.3
47.5°	1392.9	1382.2	1365.5	1317.6	1296.4	1180.9	1093.5	1082.8	1131.5	1180.1	1111.7
50°	1519.8	1519.8	1478.0	1459.7	1496.2	1414.9	1279.6	1269.0	1292.6	1331.3	1241.6
52.5°	1620.1	1601.8	1572.2	1588.2	1692.3	1655.0	1465.8	1445.3	1463.5	1473.4	1354.9
55°	1661.9	1644.4	1642.1	1700.6	1861.7	1810.0	1656.5	1638.3	1636.8	1588.2	1453.7
57.5°	1670.2	1655.0	1683.9	1786.5	2026.6	1936.9	1846.5	1832.8	1790.3	1668.7	1554.7
60°	1599.6	1607.1	1677.1	1833.6	2123.9	2047.1	2006.8	1992.4	1894.4	1737.1	1667.2
62.5°	1454.4	1472.7	1603.3	1838.2	2088.2	2092.0	2095.8	2085.9	1974.9	1799.4	1780.4
65°	1282.7	1288.0	1445.3	1775.1	2025.8	2078.3	2161.1	2160.3	2036.5	1869.3	1908.1
67.5°	1057.0	1066.1	1202.1	1562.3	1901.2	2072.2	2247.0	2244.7	2106.4	1949.1	1984.1
70°	786.5	797.9	908.1	1215.1	1623.1	1996.2	2359.4	2361.0	2180.1	2009.9	1931.6
71°	613.2	633.7	749.2	1031.9	1481.0	1919.5	2370.1	2383.7	2188.5	2001.5	1823.7
72.5°	300.9	325.2	470.4	726.4	1218.8	1747.7	2300.2	2326.8	2136.0	1897.4	1559.3
75°	78.3	82.8	140.6	297.1	653.5	1158.1	1854.9	1922.5	1746.2	1444.5	952.9
77.5°	49.4	50.9	66.1	115.5	244.7	440.0	1089.7	1123.1	997.7	731.8	335.9
80°	35.0	35.7	41.8	74.5	142.9	128.4	392.1	406.5	360.9	193.8	60.0
82.5°	21.3	21.3	30.4	47.9	88.1	69.9	103.3	110.2	97.3	54.0	19.8
85°	12.2	12.9	19.0	32.7	41.8	34.2	38.8	41.0	41.8	35.7	8.4
87.5°	9.9	10.6	16.7	27.4	22.8	16.7	16.7	17.5	18.2	21.3	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°	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5	368.5
2.5°	367.0	367.0	367.8	367.0	367.0	367.0	367.8	367.8	367.8	369.3	370.1
5°	368.5	368.5	368.5	367.8	367.0	367.0	368.5	369.3	369.3	371.6	371.6
7.5°	372.3	372.3	370.8	369.3	367.8	365.5	366.3	367.0	366.3	367.0	367.0
10°	380.7	380.7	378.4	375.4	370.8	364.0	354.9	343.5	332.8	329.0	327.5
12.5°	394.4	393.6	389.1	383.7	373.9	350.3	316.1	275.8	242.4	233.3	230.2
15°	409.6	408.1	402.7	393.6	367.0	304.7	233.3	181.6	149.7	142.1	140.6
17.5°	425.5	423.3	415.7	397.4	335.9	226.4	150.5	114.0	96.5	95.0	95.7
20°	442.3	439.2	428.6	389.8	271.3	151.2	97.3	88.1	86.6	86.6	87.4
22.5°	461.2	457.4	443.0	362.5	197.6	100.3	83.6	82.8	82.1	81.3	81.3
25°	483.3	478.7	456.7	313.1	136.0	82.1	79.8	77.5	76.0	74.5	73.7
27.5°	509.9	503.8	467.3	252.3	93.5	76.7	75.2	71.4	68.4	65.3	65.3
30°	536.5	528.9	464.3	190.0	76.0	71.4	68.4	63.8	59.3	56.2	55.5
32.5°	564.6	557.0	444.5	127.7	69.1	65.3	61.6	54.7	49.4	45.6	44.8
35°	606.4	600.3	405.8	84.3	62.3	57.8	52.4	45.6	38.8	35.0	34.2
37.5°	668.7	661.1	357.9	64.6	54.7	47.9	43.3	35.7	28.9	25.1	24.3
40°	752.3	729.5	300.9	57.0	47.9	39.5	33.4	25.8	20.5	18.2	18.2
42.5°	849.5	795.6	239.4	51.7	42.6	32.7	24.3	17.5	14.4	13.7	13.7
45°	952.9	857.1	177.8	47.9	37.2	25.8	17.5	12.2	10.6	9.9	9.9
47.5°	1059.3	907.3	123.9	43.3	31.2	19.8	12.2	9.1	7.6	6.8	6.8
50°	1158.8	940.0	87.4	38.8	26.6	14.4	9.1	6.8	5.3	5.3	5.3
52.5°	1228.0	936.9	63.1	33.4	20.5	9.9	6.1	4.6	4.6	4.6	4.6
55°	1288.8	925.5	49.4	28.9	16.0	6.8	4.6	3.8	3.8	3.0	3.0
57.5°	1340.4	907.3	41.8	23.6	11.4	5.3	3.0	3.0	2.3	2.3	2.3
60°	1384.5	884.5	35.0	19.8	7.6	3.8	2.3	1.5	1.5	0.8	1.5
62.5°	1444.5	870.1	30.4	15.2	5.3	2.3	1.5	0.8	0.8	0.0	0.0
65°	1488.6	842.7	25.8	10.6	3.0	1.5	0.8	0.8	0.0	0.0	0.0
67.5°	1490.1	793.3	19.0	6.1	2.3	1.5	0.8	0.0	0.0	0.0	0.0
70°	1370.1	676.3	12.2	3.0	1.5	0.8	0.8	0.0	0.0	0.0	0.0
71°	1259.9	598.8	9.9	2.3	1.5	0.8	0.0	0.0	0.0	0.0	0.0
72.5°	1038.0	440.0	7.6	2.3	0.8	0.8	0.0	0.0	0.0	0.0	0.0
75°	572.2	159.6	3.8	1.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	183.1	48.6	2.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	31.2	7.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.6	3.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.8	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)