

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: P234761

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-8027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234761
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T4W-8027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4160 lumens
Efficiency: N/A
Efficacy: 65.0 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 - G2

Input Watts (W): 64
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

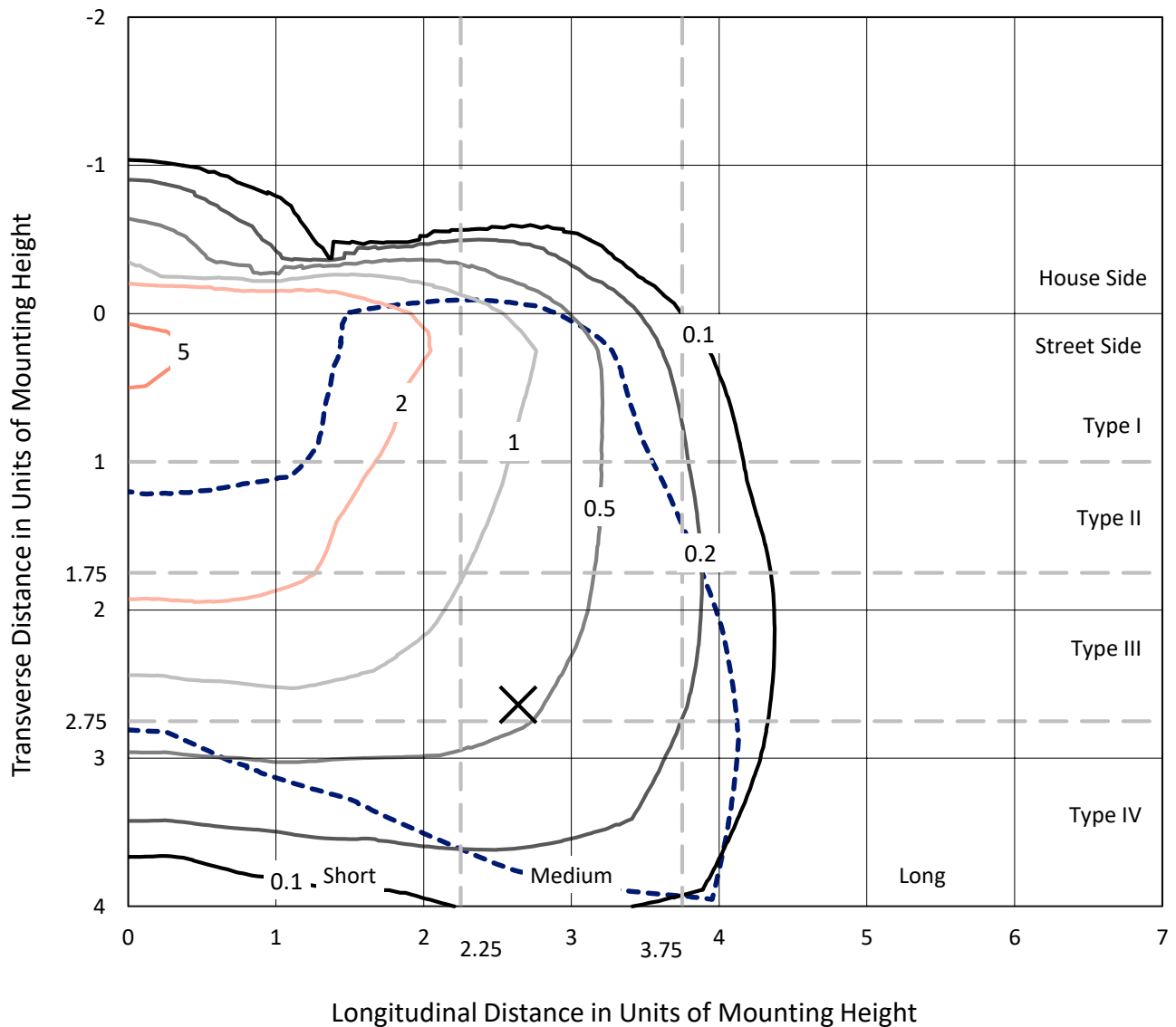


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

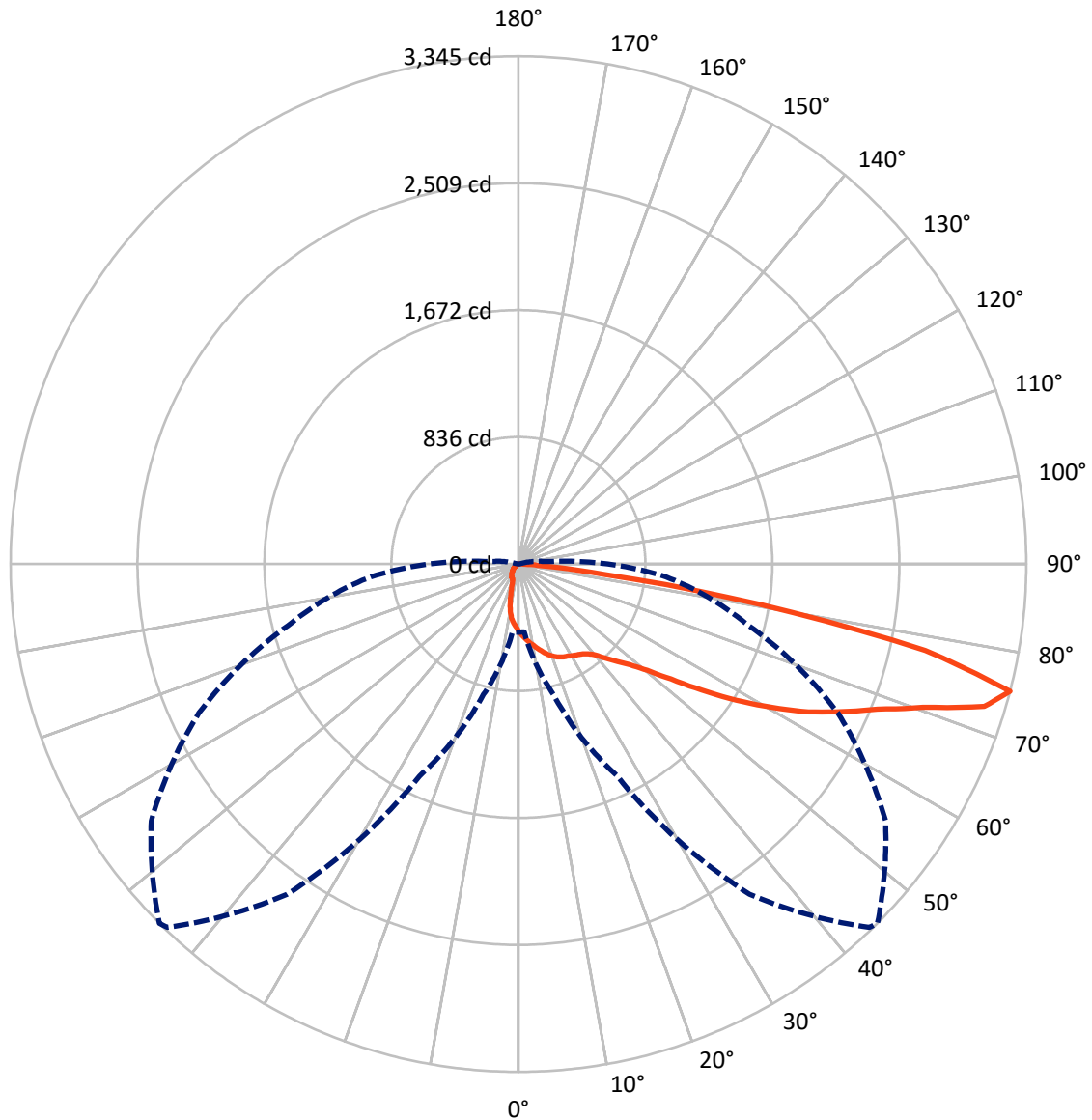


Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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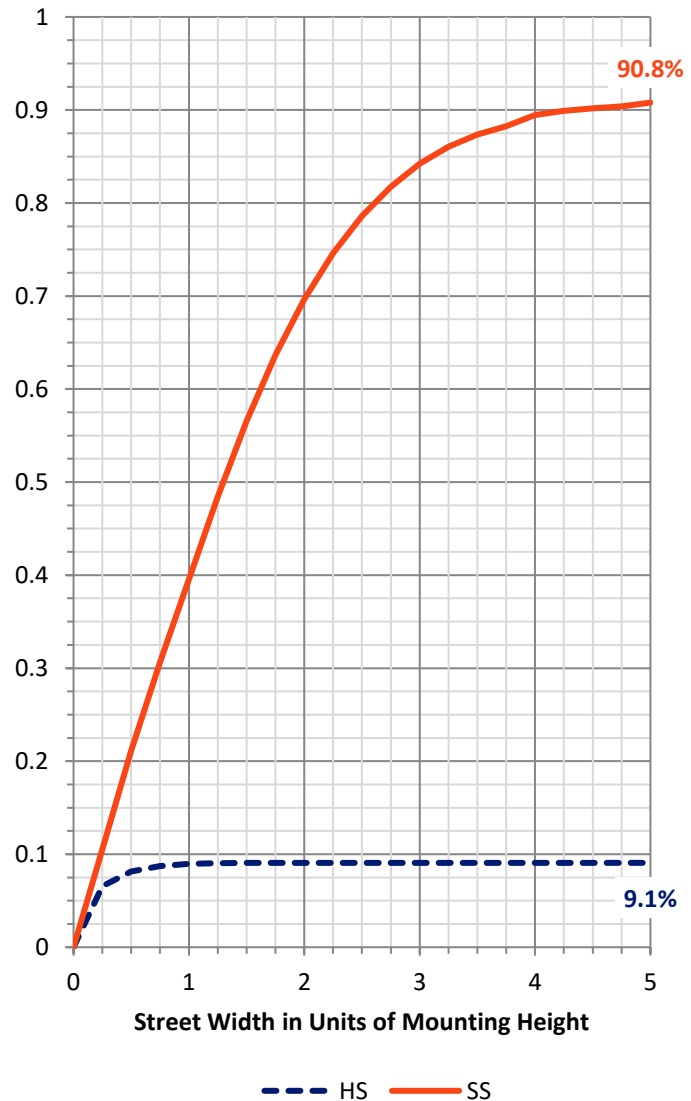
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	380.5	0.0	380.5
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	3779.5	0.0	3779.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	4160.0	0.0	4160.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.0
10°-20°	119.0	2.9
20°-30°	197.0	4.7
30°-40°	285.1	6.9
40°-50°	466.9	11.2
50°-60°	831.9	20.0
60°-70°	1223.0	29.4
70°-80°	922.7	22.2
80°-90°	72.4	1.7
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°	4160.0	100.0
0°-180°	4160.0	100.0



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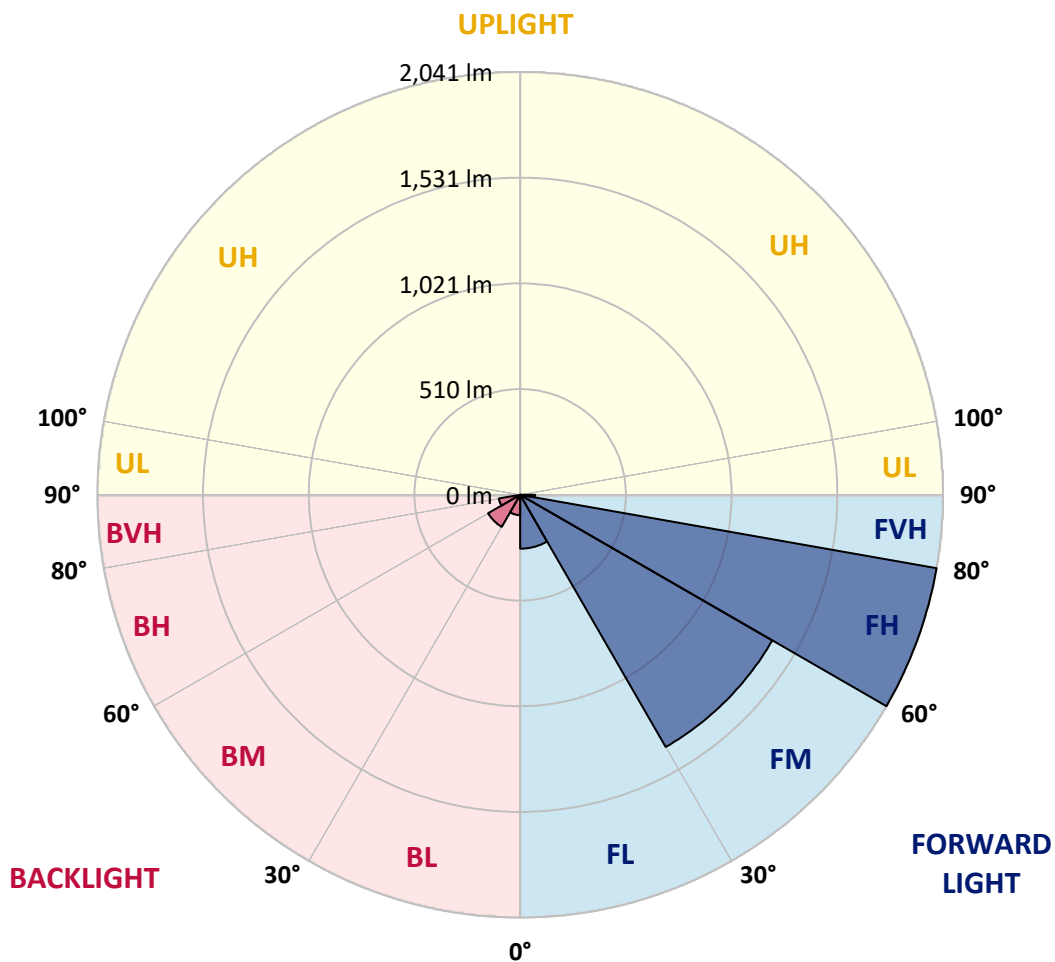
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	260.2	6.3			
FM	(30°-60°)	1405.6	33.8			
FH	(60°-80°)	2041.5	49.1			G2/5000
FVH	(80°-90°)	72.2	1.7			G1/100
BL	(0°-30°)	97.8	2.4	B0/110		
BM	(30°-60°)	178.3	4.3	B0/220		
BH	(60°-80°)	104.2	2.5	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9
2.5°	483.3	483.3	482.3	481.4	476.4	471.5	470.5	467.6	458.7	452.8	446.9
5°	523.7	524.7	522.7	517.8	506.9	496.1	495.1	487.3	470.5	458.7	445.9
7.5°	562.1	564.0	559.1	550.3	537.5	521.7	520.7	506.0	484.3	467.6	448.9
10°	594.6	594.6	587.7	576.8	563.1	546.3	544.4	527.6	503.0	482.3	457.7
12.5°	630.0	629.0	619.2	604.4	588.7	572.9	571.9	551.2	527.6	501.0	470.5
15°	662.5	660.5	647.7	633.9	617.2	600.5	599.5	578.8	554.2	522.7	489.2
17.5°	680.2	679.2	667.4	653.6	639.8	627.0	626.1	604.4	577.8	545.3	507.9
20°	683.2	684.1	674.3	662.5	654.6	647.7	647.7	628.0	599.5	565.0	527.6
22.5°	684.1	687.1	680.2	664.4	662.5	663.5	665.4	649.7	620.2	587.7	548.3
25°	691.0	695.0	690.0	671.3	669.4	676.3	678.2	671.3	644.8	612.3	571.9
27.5°	704.8	708.7	704.8	681.2	678.2	685.1	687.1	691.0	671.3	635.9	596.5
30°	732.4	733.4	724.5	695.0	689.1	697.9	700.9	711.7	695.9	658.5	620.2
32.5°	780.6	770.8	744.2	704.8	699.9	709.7	712.7	724.5	718.6	680.2	644.8
35°	879.0	827.9	766.8	718.6	713.7	723.5	727.4	744.2	747.1	710.7	675.3
37.5°	878.1	831.8	820.0	745.2	738.3	745.2	750.1	770.8	782.6	751.1	719.6
40°	940.1	920.4	920.4	795.4	772.7	782.6	787.5	808.2	828.8	804.2	771.7
42.5°	1135.0	1122.2	1108.4	891.8	821.0	848.5	851.5	864.3	888.9	881.0	842.6
45°	1352.5	1340.7	1287.6	1055.2	903.7	908.6	915.5	936.1	971.6	986.3	941.1
47.5°	1522.8	1511.0	1465.7	1252.1	1032.6	989.3	989.3	1029.6	1084.8	1122.2	1078.9
50°	1659.6	1645.9	1618.3	1461.8	1244.2	1105.4	1099.5	1146.8	1228.5	1286.6	1257.0
52.5°	1792.5	1752.2	1735.4	1678.3	1483.4	1273.8	1258.0	1291.5	1404.7	1476.6	1451.9
55°	1881.1	1875.2	1857.5	1877.2	1734.5	1478.5	1464.7	1471.6	1613.4	1661.6	1631.1
57.5°	1963.8	1962.8	2002.2	2093.8	2008.1	1712.8	1691.1	1680.3	1815.2	1803.4	1829.9
60°	2066.2	2048.5	2140.0	2270.9	2259.1	1941.2	1916.6	1894.9	1969.7	1936.3	2068.2
62.5°	2071.1	2066.2	2252.2	2440.2	2508.2	2173.5	2144.9	2067.2	2104.6	2066.2	2295.5
65°	1883.1	1907.7	2299.5	2529.8	2716.9	2377.2	2342.8	2221.7	2224.7	2199.1	2563.3
67.5°	1840.8	1853.6	2169.5	2626.3	2867.5	2583.0	2550.5	2399.9	2364.5	2366.4	2721.8
70°	1735.4	1755.1	2008.1	2619.4	2986.6	2857.6	2825.1	2661.7	2576.1	2480.6	2599.7
72.5°	1325.9	1359.4	1692.1	2296.5	2954.1	3216.9	3208.1	2993.5	2660.7	2277.8	1966.8
75°	448.9	447.9	888.9	1542.5	2653.9	3327.2	3344.9	2952.1	2321.1	1571.1	976.5
77.5°	96.5	97.5	183.1	625.1	1763.0	2671.6	2739.5	2226.6	1497.2	699.9	223.5
80°	47.2	48.2	75.8	165.4	704.8	1498.2	1604.5	1144.8	553.2	139.8	37.4
82.5°	23.6	24.6	39.4	87.6	260.9	532.5	569.0	421.3	158.5	78.7	18.7
85°	8.9	8.9	19.7	52.2	119.1	125.0	153.6	122.1	95.5	64.0	4.9
87.5°	2.0	2.0	10.8	25.6	53.2	39.4	39.4	37.4	58.1	43.3	2.0
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°	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9	444.9
2.5°	444.0	440.0	433.1	426.2	421.3	415.4	412.5	409.5	408.5	407.5	409.5
5°	439.0	433.1	420.3	409.5	399.7	391.8	385.9	380.0	377.0	375.0	376.0
7.5°	439.0	430.2	411.5	394.7	379.0	362.2	345.5	332.7	322.9	317.0	318.0
10°	444.0	432.1	407.5	384.9	355.4	319.9	283.5	255.9	237.2	226.4	226.4
12.5°	454.8	439.0	408.5	373.1	322.9	260.9	205.7	172.3	158.5	150.6	151.6
15°	469.5	450.8	413.4	357.3	277.6	193.9	143.7	122.1	122.1	124.0	125.0
17.5°	486.3	465.6	417.4	333.7	219.5	138.8	113.2	111.2	114.2	119.1	119.1
20°	503.0	480.4	419.3	296.3	164.4	110.2	107.3	107.3	109.3	114.2	115.2
22.5°	523.7	499.1	417.4	250.0	123.0	104.3	103.4	103.4	103.4	109.3	109.3
25°	545.3	520.7	409.5	200.8	104.3	100.4	99.4	98.4	98.4	103.4	104.3
27.5°	569.9	543.4	390.8	153.6	98.4	96.5	95.5	93.5	93.5	97.5	97.5
30°	594.6	569.0	362.2	116.2	93.5	92.5	90.6	88.6	86.6	90.6	90.6
32.5°	621.1	595.5	324.8	92.5	86.6	86.6	85.6	82.7	80.7	82.7	83.7
35°	656.6	626.1	282.5	80.7	77.8	77.8	77.8	76.8	72.8	74.8	74.8
37.5°	703.8	668.4	233.3	74.8	70.9	68.9	68.9	68.9	66.0	66.9	66.9
40°	763.9	717.6	186.0	69.9	66.0	61.0	59.1	60.0	58.1	58.1	57.1
42.5°	845.6	770.8	139.8	66.0	62.0	55.1	51.2	50.2	48.2	47.2	47.2
45°	962.7	835.7	100.4	62.0	59.1	48.2	44.3	41.3	36.4	33.5	33.5
47.5°	1114.3	909.6	74.8	58.1	56.1	42.3	37.4	31.5	24.6	22.6	22.6
50°	1299.4	992.2	63.0	52.2	51.2	37.4	29.5	20.7	13.8	11.8	12.8
52.5°	1479.5	1070.0	56.1	46.3	45.3	32.5	21.7	10.8	5.9	5.9	5.9
55°	1631.1	1125.1	51.2	41.3	39.4	25.6	11.8	4.9	3.0	3.0	3.0
57.5°	1767.9	1156.6	46.3	36.4	31.5	17.7	4.9	2.0	2.0	1.0	1.0
60°	1892.9	1175.3	40.4	31.5	24.6	9.8	2.0	1.0	1.0	0.0	0.0
62.5°	2016.0	1189.1	34.5	25.6	18.7	3.9	1.0	1.0	0.0	0.0	0.0
65°	2109.5	1184.2	27.6	20.7	11.8	2.0	1.0	0.0	0.0	0.0	0.0
67.5°	2106.5	1117.3	20.7	15.7	5.9	1.0	0.0	0.0	0.0	0.0	0.0
70°	1884.1	941.1	13.8	9.8	2.0	1.0	0.0	0.0	0.0	0.0	0.0
72.5°	1336.8	603.4	8.9	5.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	588.7	183.1	4.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	115.2	42.3	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	27.6	4.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.8	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	1.0	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)