

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: P265579

Luminaire Tested: **ARCH-L-AF72-90-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265579
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-L-AF72-90-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 400mA LIGHT ENGINES 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: 8189.5 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 93
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

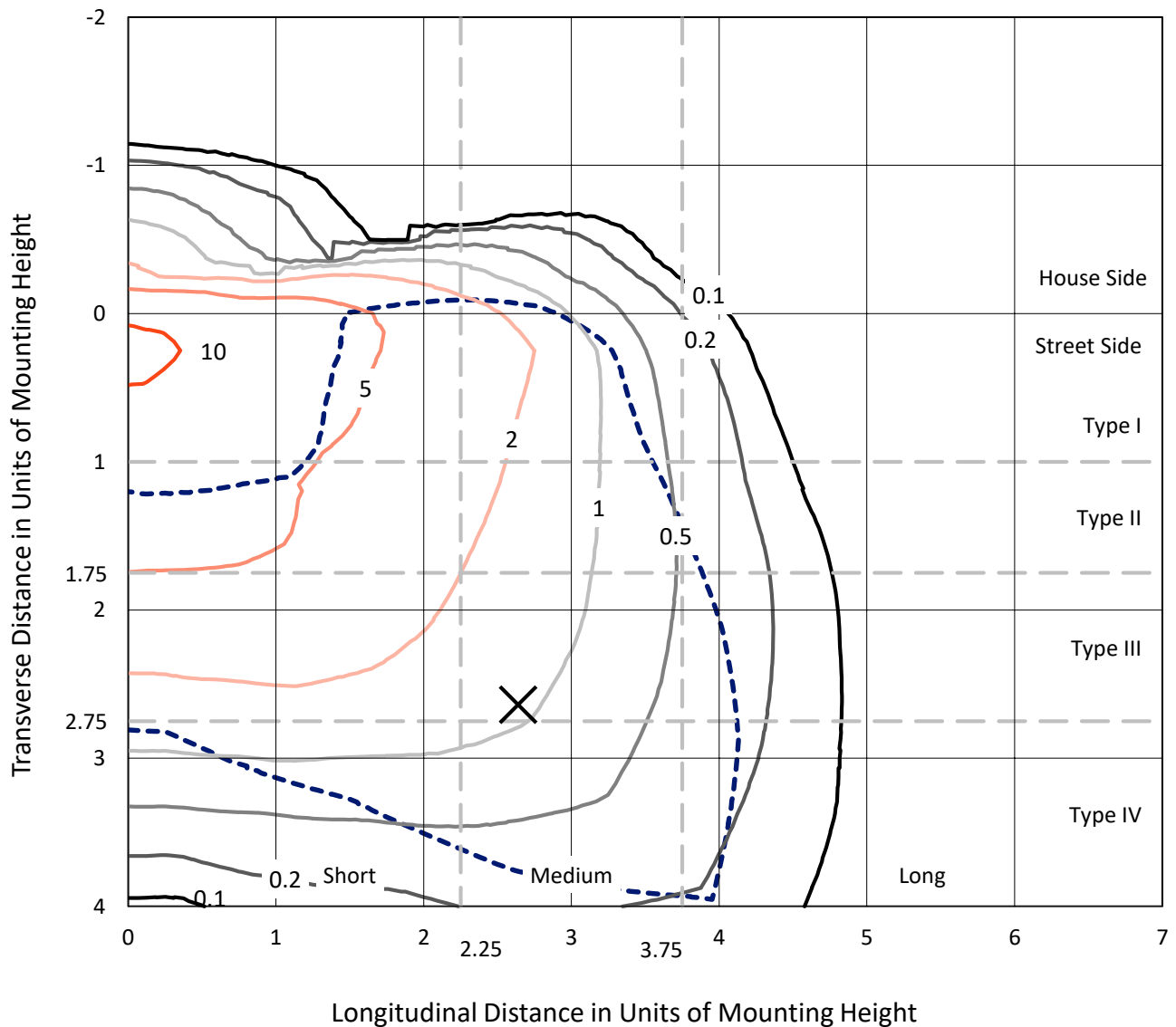


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

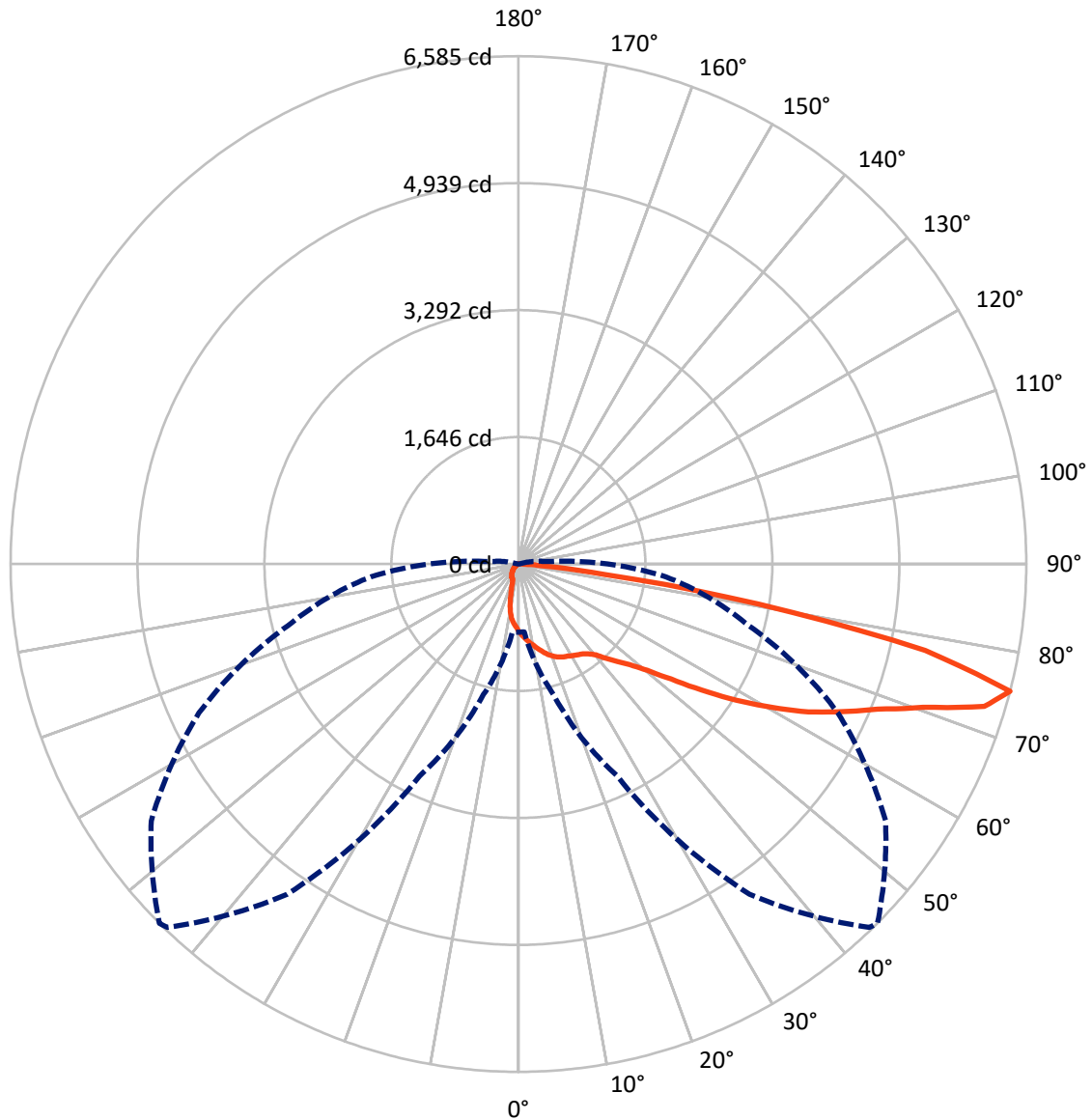


Based on 10 foot mounting height. Maximum calculated value = 11.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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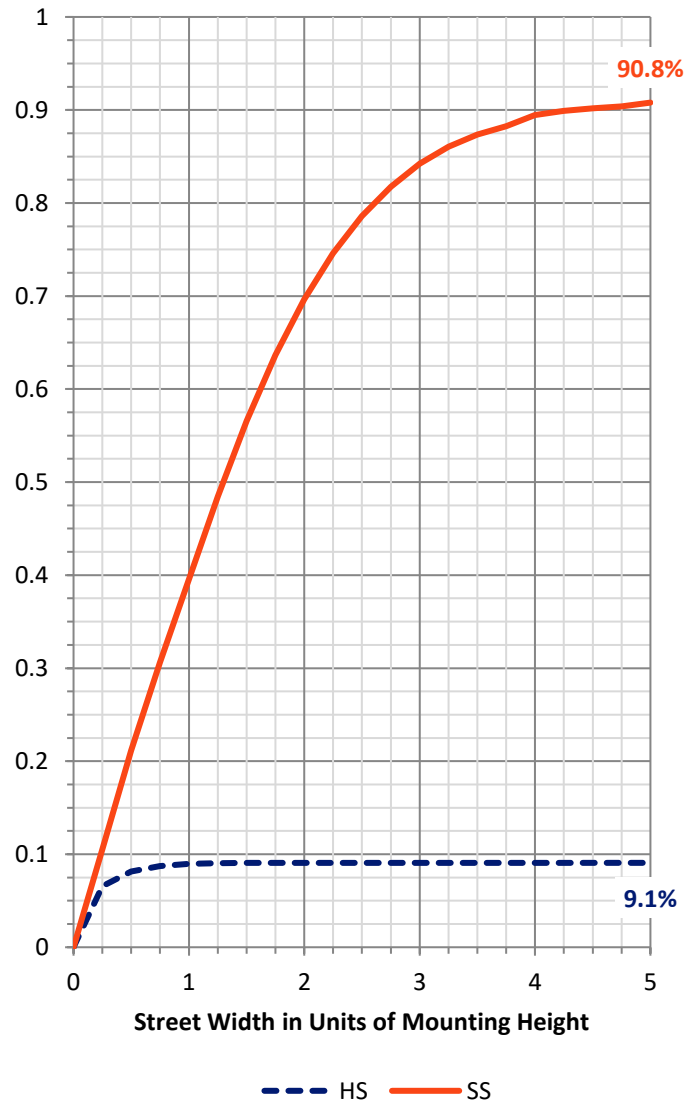
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	749.1	0.0	749.1
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	7440.4	0.0	7440.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	8189.5	0.0	8189.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.7	1.0
10°-20°	234.2	2.9
20°-30°	387.9	4.7
30°-40°	561.3	6.9
40°-50°	919.2	11.2
50°-60°	1637.7	20.0
60°-70°	2407.7	29.4
70°-80°	1816.4	22.2
80°-90°	142.5	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°	8189.5	100.0
0°-180°	8189.5	100.0



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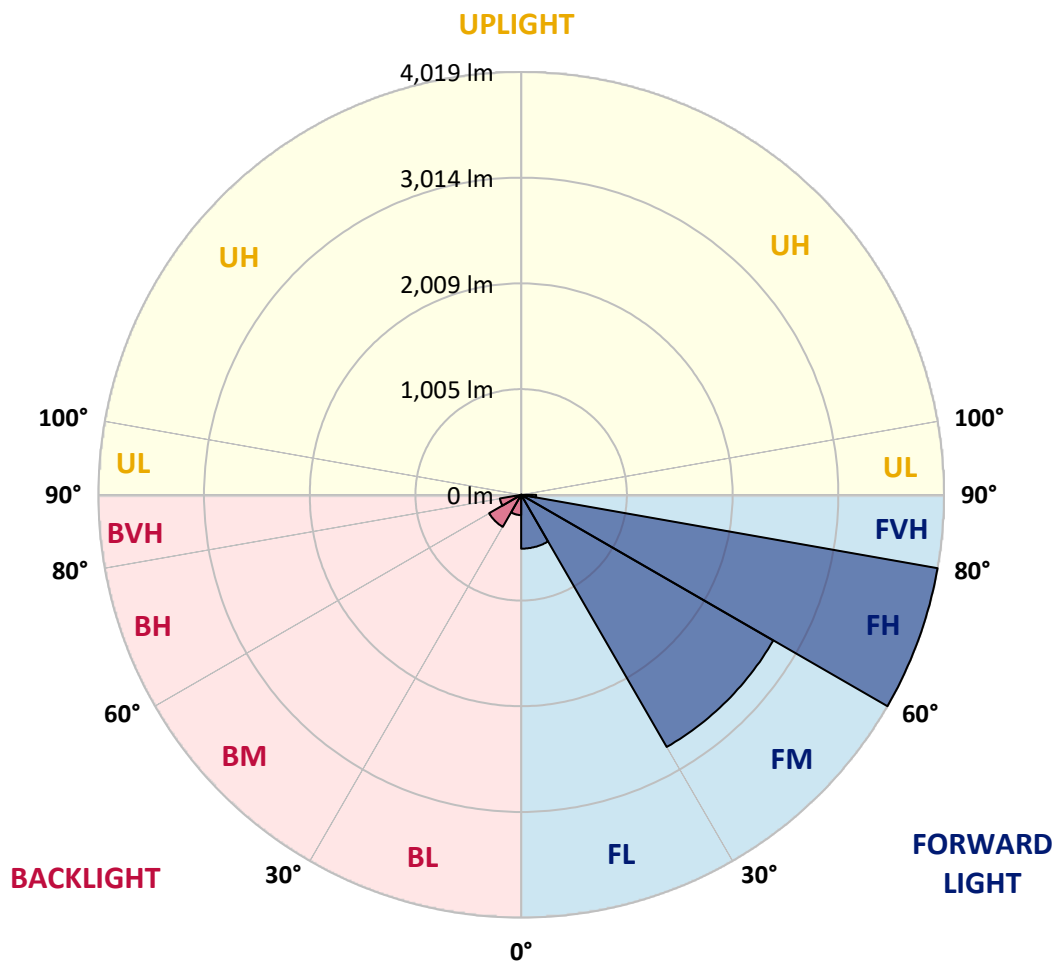
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	512.2	6.3			
FM	(30°-60°)	2767.2	33.8			
FH	(60°-80°)	4018.9	49.1			G2/5000
FVH	(80°-90°)	142.1	1.7			G2/225
BL	(0°-30°)	192.5	2.4	B1/500		
BM	(30°-60°)	351.0	4.3	B1/1000		
BH	(60°-80°)	205.2	2.5	B1/500		G1/500
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: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8
2.5°	951.5	951.5	949.6	947.6	937.9	928.2	926.3	920.5	903.1	891.4	879.8
5°	1031.0	1033.0	1029.0	1019.2	997.9	976.6	974.8	959.2	926.3	903.1	877.9
7.5°	1106.5	1110.3	1100.8	1083.3	1058.1	1027.0	1025.1	996.0	953.5	920.5	883.7
10°	1170.4	1170.4	1156.8	1135.5	1108.5	1075.5	1071.7	1038.7	990.2	949.6	901.1
12.5°	1240.2	1238.4	1218.9	1189.8	1158.9	1127.8	1125.8	1085.2	1038.7	986.3	926.3
15°	1304.2	1300.2	1275.1	1247.9	1215.0	1182.1	1180.2	1139.5	1091.0	1029.0	963.2
17.5°	1339.1	1337.0	1314.0	1286.7	1259.7	1234.5	1232.5	1189.8	1137.6	1073.6	1000.0
20°	1344.9	1346.7	1327.4	1304.2	1288.7	1275.1	1275.1	1236.3	1180.2	1112.3	1038.7
22.5°	1346.7	1352.6	1339.1	1308.0	1304.2	1306.1	1310.0	1278.9	1220.8	1156.8	1079.4
25°	1360.4	1368.1	1358.4	1321.6	1317.8	1331.3	1335.2	1321.6	1269.2	1205.3	1125.8
27.5°	1387.5	1395.2	1387.5	1341.0	1335.2	1348.7	1352.6	1360.4	1321.6	1251.9	1174.4
30°	1441.8	1443.7	1426.2	1368.1	1356.5	1374.0	1379.7	1401.0	1370.0	1296.4	1220.8
32.5°	1536.7	1517.3	1465.0	1387.5	1377.8	1397.3	1403.1	1426.2	1414.7	1339.1	1269.2
35°	1730.6	1629.7	1509.6	1414.7	1404.9	1424.4	1432.1	1465.0	1470.9	1399.1	1329.3
37.5°	1728.6	1637.5	1614.3	1466.9	1453.4	1466.9	1476.6	1517.3	1540.7	1478.6	1416.5
40°	1850.7	1811.9	1811.9	1565.7	1521.2	1540.7	1550.2	1591.0	1631.7	1583.3	1519.3
42.5°	2234.4	2209.1	2182.1	1755.6	1616.2	1670.4	1676.2	1701.4	1749.9	1734.4	1658.8
45°	2662.5	2639.4	2534.7	2077.4	1779.0	1788.6	1802.2	1843.0	1912.6	1941.7	1852.6
47.5°	2997.9	2974.6	2885.4	2464.9	2032.9	1947.5	1947.5	2026.9	2135.5	2209.1	2124.0
50°	3267.2	3240.0	3185.7	2877.7	2449.5	2176.2	2164.6	2257.6	2418.4	2532.9	2474.7
52.5°	3528.8	3449.4	3416.4	3304.1	2920.3	2507.6	2476.5	2542.5	2765.3	2906.7	2858.3
55°	3703.3	3691.7	3656.7	3695.4	3414.5	2910.7	2883.5	2897.2	3176.1	3271.1	3211.0
57.5°	3866.0	3864.1	3941.7	4121.9	3953.3	3371.9	3329.2	3307.9	3573.4	3550.1	3602.5
60°	4067.5	4032.8	4213.0	4470.7	4447.4	3821.4	3773.1	3730.4	3877.7	3811.8	4071.4
62.5°	4077.2	4067.5	4433.9	4804.0	4937.7	4278.7	4222.7	4069.5	4143.2	4067.5	4519.1
65°	3707.1	3755.5	4526.7	4980.3	5348.5	4679.9	4612.1	4373.8	4379.5	4329.1	5046.1
67.5°	3623.9	3648.9	4271.0	5170.1	5644.9	5084.9	5020.9	4724.5	4654.7	4658.6	5358.2
70°	3416.4	3455.2	3953.3	5156.6	5879.4	5625.5	5561.6	5240.0	5071.3	4883.4	5117.9
72.5°	2610.3	2676.2	3331.2	4521.0	5815.4	6333.0	6315.4	5893.1	5237.9	4484.2	3871.9
75°	883.7	881.7	1749.9	3036.6	5224.5	6549.9	6584.8	5811.7	4569.5	3092.9	1922.4
77.5°	189.9	191.9	360.4	1230.6	3470.7	5259.3	5393.1	4383.4	2947.5	1377.8	439.9
80°	93.1	95.0	149.2	325.5	1387.5	2949.4	3158.7	2253.7	1089.0	275.2	73.7
82.5°	46.5	48.5	77.6	172.5	513.6	1048.4	1120.0	829.5	312.0	155.0	36.8
85°	17.4	17.4	38.7	102.6	234.5	246.1	302.3	240.2	187.9	125.9	9.7
87.5°	3.9	3.9	21.3	50.3	104.7	77.6	77.6	73.7	114.4	85.2	3.9
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°	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8	875.8
2.5°	874.1	866.2	852.6	839.0	829.5	817.7	812.0	806.1	804.3	802.2	806.1
5°	864.3	852.6	827.5	806.1	786.7	771.3	759.6	748.0	742.2	738.3	740.3
7.5°	864.3	846.8	810.0	777.0	746.1	713.2	680.1	655.0	635.6	624.1	625.8
10°	874.1	850.8	802.2	757.7	699.6	629.8	558.0	503.8	466.9	445.6	445.6
12.5°	895.3	864.3	804.3	734.5	635.6	513.6	405.0	339.1	312.0	296.5	298.4
15°	924.4	887.5	814.0	703.5	546.4	381.8	283.0	240.2	240.2	244.2	246.1
17.5°	957.4	916.6	821.7	656.9	432.2	273.3	222.9	218.9	224.8	234.5	234.5
20°	990.2	945.6	825.5	583.3	323.6	217.0	211.2	211.2	215.1	224.8	226.7
22.5°	1031.0	982.4	821.7	492.2	242.3	205.4	203.5	203.5	203.5	215.1	215.1
25°	1073.6	1025.1	806.1	395.3	205.4	197.6	195.7	193.8	193.8	203.5	205.4
27.5°	1122.1	1069.7	769.3	302.3	193.8	189.9	187.9	184.2	184.2	191.9	191.9
30°	1170.4	1120.0	713.2	228.7	184.2	182.1	178.3	174.5	170.5	178.3	178.3
32.5°	1222.9	1172.4	639.6	182.1	170.5	170.5	168.6	162.9	158.9	162.9	164.7
35°	1292.5	1232.5	556.2	158.9	153.2	153.2	153.2	151.2	143.4	147.3	147.3
37.5°	1385.5	1315.7	459.3	147.3	139.5	135.6	135.6	135.6	129.8	131.8	131.8
40°	1503.8	1412.7	366.2	137.6	129.8	120.2	116.3	118.1	114.4	114.4	112.4
42.5°	1664.6	1517.3	275.2	129.8	122.1	108.5	100.8	98.9	95.0	93.1	93.1
45°	1895.2	1645.2	197.6	122.1	116.3	95.0	87.1	81.3	71.8	65.8	65.8
47.5°	2193.7	1790.6	147.3	114.4	110.4	83.4	73.7	62.1	48.5	44.6	44.6
50°	2558.0	1953.4	124.1	102.6	100.8	73.7	58.1	40.8	27.0	23.3	25.2
52.5°	2912.6	2106.4	110.4	91.1	89.1	64.0	42.6	21.3	11.6	11.6	11.6
55°	3211.0	2215.0	100.8	81.3	77.6	50.3	23.3	9.7	5.7	5.7	5.7
57.5°	3480.5	2276.9	91.1	71.8	62.1	34.9	9.7	3.9	3.9	1.9	1.9
60°	3726.4	2313.9	79.5	62.1	48.5	19.4	3.9	1.9	1.9	0.0	0.0
62.5°	3968.7	2341.0	67.8	50.3	36.8	7.7	1.9	1.9	0.0	0.0	0.0
65°	4152.9	2331.2	54.3	40.8	23.3	3.9	1.9	0.0	0.0	0.0	0.0
67.5°	4147.0	2199.5	40.8	31.0	11.6	1.9	0.0	0.0	0.0	0.0	0.0
70°	3709.0	1852.6	27.0	19.4	3.9	1.9	0.0	0.0	0.0	0.0	0.0
72.5°	2631.7	1187.9	17.4	11.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	1158.9	360.4	9.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	226.7	83.4	5.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.3	9.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.3	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	1.9	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)