

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: INVUE

Report Number: P677190

Luminaire Tested: **CCW-SA-2C-830-U-SL4-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677190
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2C-830-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @615mA w/
SL4 distribution lens and House Side Shield
Light Source: (32) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5934.5 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

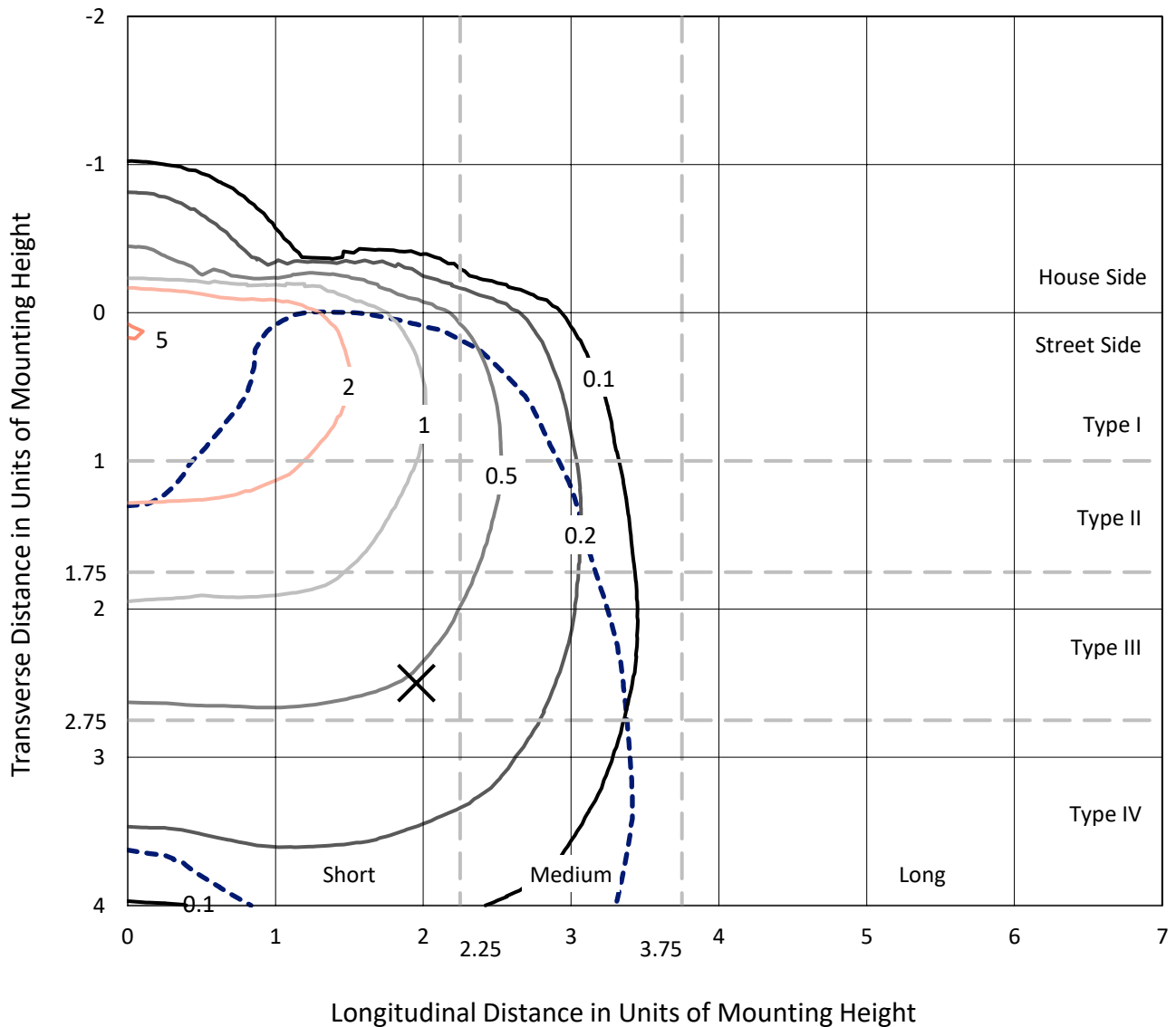
Input Watts (W): 62.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P677190
 CATALOG NUMBER: CCW-SA-2C-830-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

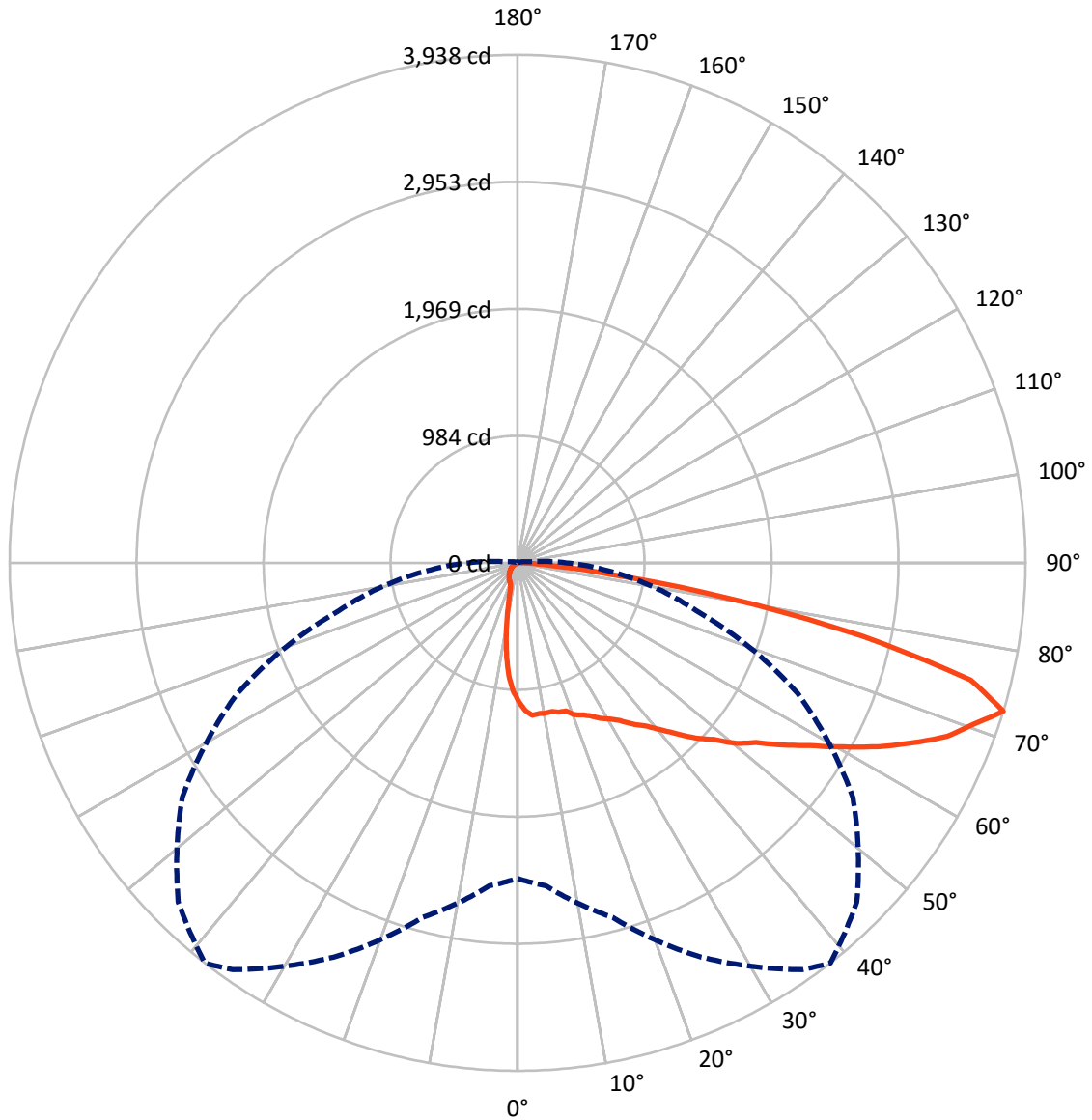
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Short - N/A

REPORT NUMBER: P677190
CATALOG NUMBER: CCW-SA-2C-830-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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 CATALOG NUMBER: CCW-SA-2C-830-U-SL4-HSS

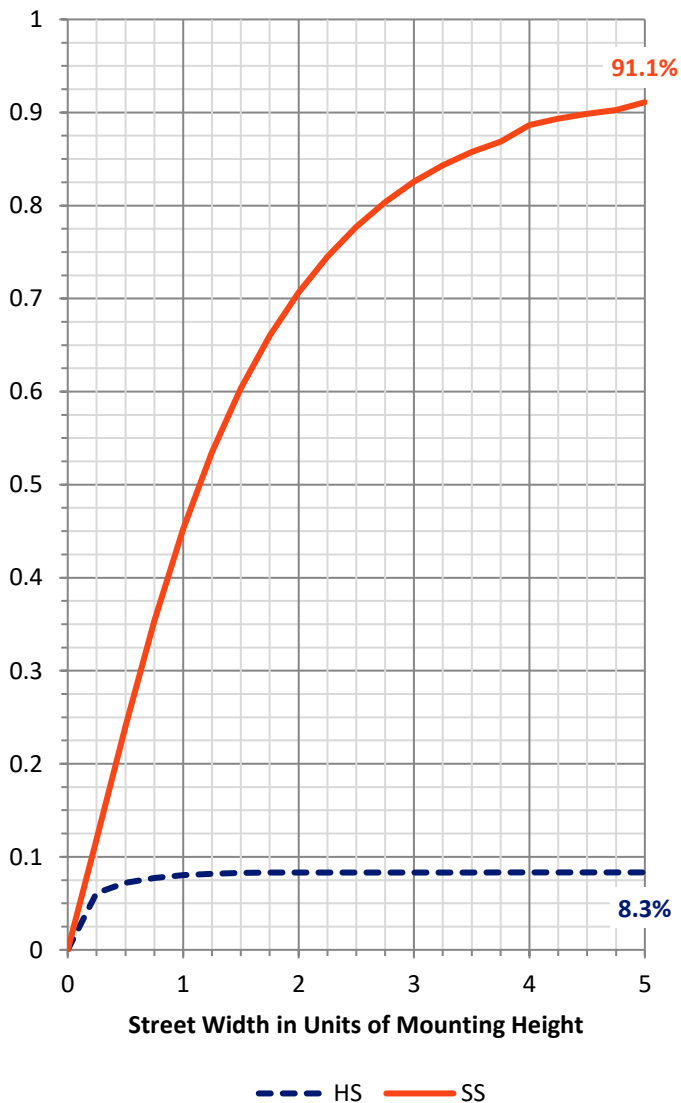
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	497.0	0.0	497.0
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	5437.5	0.0	5437.5
	% Fixture	91.6	0.0	91.6
Total	Lumens	5934.5	0.0	5934.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	1.6
10°-20°	230.0	3.9
20°-30°	368.7	6.2
30°-40°	556.7	9.4
40°-50°	847.2	14.3
50°-60°	1192.8	20.1
60°-70°	1457.0	24.6
70°-80°	1058.0	17.8
80°-90°	130.3	2.2
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°	5934.5	100.0
0°-180°	5934.5	100.0

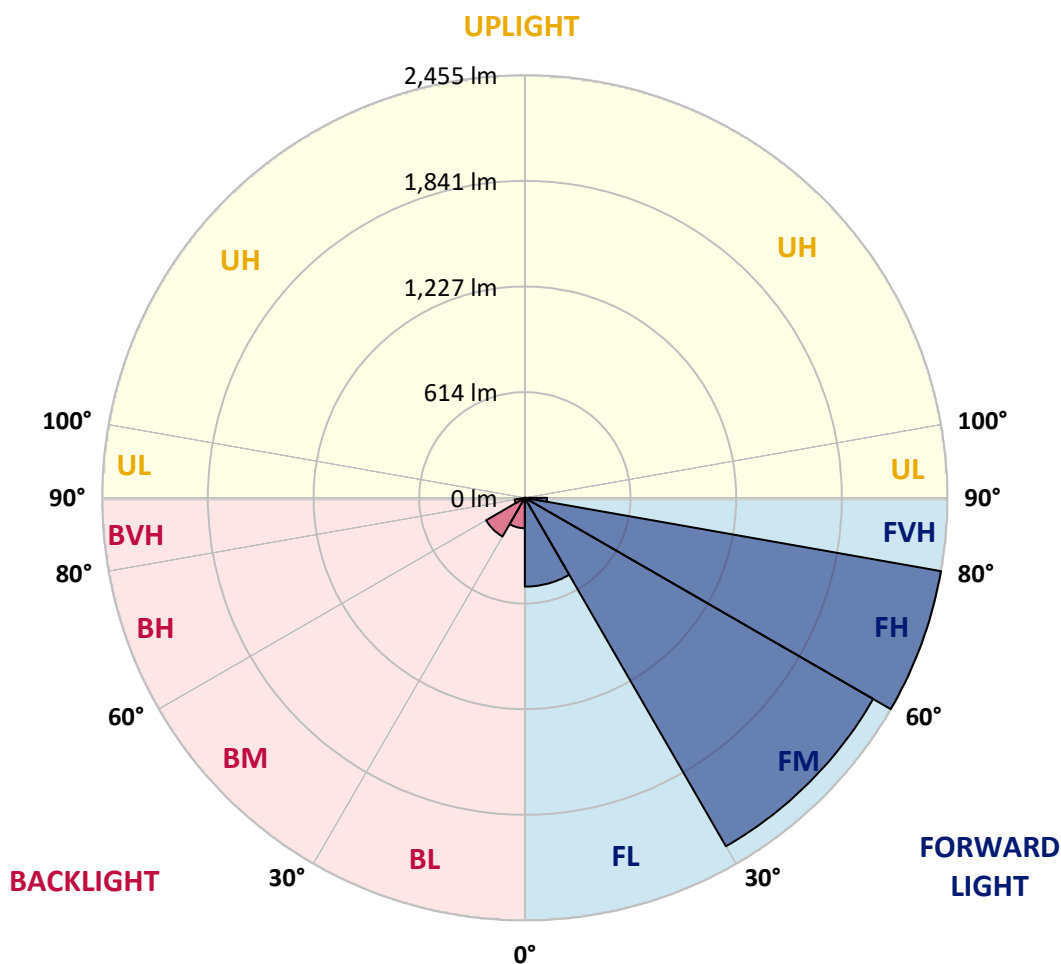


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 CATALOG NUMBER: CCW-SA-2C-830-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	516.2	8.7			
FM (30°-60°)	2337.0	39.4			
FH (60°-80°)	2454.7	41.4			G2/5000
FVH (80°-90°)	129.6	2.2			G2/225
BL (0°-30°)	176.4	3.0	B1/500		
BM (30°-60°)	259.6	4.4	B1/1000		
BH (60°-80°)	60.3	1.0	B0/110		G0/110
BVH (80°-90°)	0.7	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 Short





REPORT NUMBER: P677190

CATALOG NUMBER: CCW-SA-2C-830-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2
2.5°	1179.0	1179.0	1190.1	1179.0	1174.8	1148.4	1149.7	1135.8	1121.9	1102.4	1084.3
5°	1192.9	1202.6	1209.6	1199.9	1184.5	1187.3	1197.1	1170.6	1133.0	1109.4	1069.0
7.5°	1187.3	1208.2	1202.6	1197.1	1187.3	1180.4	1166.4	1155.3	1137.2	1114.9	1067.6
10°	1183.2	1190.1	1191.5	1187.3	1166.4	1185.9	1170.6	1152.5	1130.3	1103.8	1045.4
12.5°	1167.8	1167.8	1180.4	1170.6	1173.4	1183.2	1176.2	1172.0	1148.4	1126.1	1074.6
15°	1151.1	1156.7	1176.2	1191.5	1205.4	1201.2	1197.1	1184.5	1163.7	1138.6	1084.3
17.5°	1155.3	1158.1	1188.7	1216.6	1209.6	1206.8	1229.1	1202.6	1181.8	1153.9	1092.7
20°	1170.6	1179.0	1213.8	1250.0	1256.9	1256.9	1248.6	1233.3	1204.0	1166.4	1108.0
22.5°	1185.9	1188.7	1245.8	1291.7	1298.7	1280.6	1287.5	1243.0	1215.2	1194.3	1123.3
25°	1244.4	1238.8	1300.1	1336.3	1332.1	1314.0	1307.0	1268.1	1256.9	1219.3	1156.7
27.5°	1323.7	1300.1	1359.9	1382.2	1359.9	1365.5	1346.0	1304.3	1280.6	1258.3	1172.0
30°	1372.5	1386.4	1418.4	1440.7	1403.1	1404.5	1394.7	1348.8	1312.6	1318.2	1223.5
32.5°	1447.6	1457.4	1481.0	1490.8	1461.5	1458.8	1449.0	1412.8	1386.4	1380.8	1293.1
35°	1528.4	1546.5	1547.8	1550.6	1524.2	1535.3	1521.4	1469.9	1483.8	1493.6	1376.6
37.5°	1607.7	1591.0	1618.8	1631.4	1602.1	1602.1	1606.3	1571.5	1596.6	1625.8	1494.9
40°	1638.3	1645.3	1694.0	1684.3	1719.1	1698.2	1713.5	1705.1	1726.0	1792.8	1662.0
42.5°	1670.3	1678.7	1744.1	1762.2	1804.0	1810.9	1833.2	1834.6	1895.8	2005.8	1822.1
45°	1731.6	1717.7	1806.7	1851.3	1919.5	1939.0	1965.4	1987.7	2083.7	2213.2	2004.4
47.5°	1787.3	1767.8	1869.4	1958.5	2042.0	2046.2	2118.5	2142.2	2256.3	2403.9	2185.4
50°	1865.2	1872.2	1915.3	2068.4	2153.3	2202.1	2252.2	2330.1	2456.8	2614.1	2316.2
52.5°	1945.9	1939.0	2011.4	2161.7	2295.3	2313.4	2426.2	2513.9	2651.7	2770.0	2374.7
55°	2044.8	2053.1	2081.0	2278.6	2448.4	2491.6	2618.2	2710.1	2860.4	2836.8	2394.1
57.5°	2143.6	2135.2	2197.9	2409.5	2640.5	2672.5	2841.0	2895.2	2996.9	2881.3	2345.4
60°	2241.0	2256.3	2282.8	2557.0	2850.7	2898.0	3031.7	3059.5	3081.8	2902.2	2307.8
62.5°	2352.4	2316.2	2398.3	2712.9	3040.0	3138.8	3244.6	3134.7	3115.2	2864.6	2221.5
65°	2408.1	2419.2	2526.4	2891.1	3291.9	3364.3	3378.2	3236.3	3136.1	2781.1	2140.8
67.5°	2494.4	2509.7	2646.1	3073.4	3550.9	3591.2	3541.1	3328.1	3118.0	2672.5	1849.9
70°	2505.5	2543.1	2806.2	3264.1	3713.7	3748.5	3709.5	3389.4	2971.8	2245.2	1369.7
72.5°	2447.0	2513.9	2845.1	3372.7	3850.1	3937.8	3719.3	3173.6	2395.5	1432.3	701.5
75°	1848.5	1904.2	2604.3	3211.2	3607.9	3628.8	3265.5	2422.0	1364.1	488.6	179.6
77.5°	957.7	1053.7	1738.5	2454.0	2749.1	2726.8	2273.0	1426.7	469.1	128.1	72.4
80°	549.8	573.5	760.0	1378.0	1728.8	1643.9	1256.9	615.2	206.0	64.0	47.3
82.5°	271.4	304.8	409.2	616.6	864.4	711.3	471.9	368.9	115.5	34.8	41.8
85°	58.5	61.2	208.8	295.1	350.8	231.1	161.5	310.4	41.8	20.9	40.4
87.5°	41.8	40.4	58.5	132.2	97.4	59.9	96.0	162.9	9.7	9.7	8.4
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°	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2	1073.2
2.5°	1073.2	1060.7	1046.7	1020.3	1013.3	1009.2	985.5	984.1	979.9	970.2	966.0
5°	1044.0	1023.1	996.6	968.8	946.5	906.2	857.4	832.4	801.8	803.2	793.4
7.5°	1039.8	1000.8	963.2	904.8	833.8	758.6	683.4	634.7	599.9	579.0	583.2
10°	1020.3	991.1	929.8	821.2	707.1	593.0	496.9	424.5	382.8	350.8	360.5
12.5°	1028.6	971.6	885.3	740.5	577.7	437.1	317.4	247.8	217.1	206.0	208.8
15°	1023.1	971.6	858.8	652.8	453.8	296.5	206.0	183.7	178.2	178.2	175.4
17.5°	1039.8	982.7	814.3	566.5	325.7	197.7	176.8	172.6	168.4	168.4	168.4
20°	1063.4	988.3	783.7	470.5	229.7	174.0	165.6	162.9	161.5	161.5	160.1
22.5°	1064.8	982.7	726.6	364.7	176.8	164.2	157.3	155.9	155.9	153.1	153.1
25°	1073.2	988.3	665.3	274.2	164.2	154.5	148.9	147.5	148.9	147.5	146.2
27.5°	1094.1	998.0	604.1	200.4	154.5	146.2	142.0	140.6	140.6	140.6	137.8
30°	1120.5	998.0	535.9	165.6	146.2	137.8	133.6	132.2	130.8	130.8	130.8
32.5°	1176.2	1030.0	452.4	147.5	135.0	128.1	123.9	123.9	122.5	122.5	121.1
35°	1245.8	1052.3	367.5	136.4	125.3	118.3	114.1	114.1	112.7	112.7	111.4
37.5°	1332.1	1108.0	281.2	128.1	115.5	108.6	104.4	104.4	104.4	103.0	103.0
40°	1454.6	1165.1	208.8	116.9	105.8	98.8	96.0	94.7	93.3	93.3	90.5
42.5°	1585.4	1252.8	155.9	108.6	97.4	91.9	87.7	83.5	83.5	79.3	79.3
45°	1727.4	1329.3	126.7	98.8	89.1	82.1	77.9	75.2	71.0	68.2	68.2
47.5°	1866.6	1376.6	111.4	87.7	80.7	75.2	71.0	65.4	59.9	58.5	57.1
50°	1979.3	1390.6	98.8	79.3	73.8	68.2	62.6	55.7	50.1	47.3	45.9
52.5°	1979.3	1314.0	89.1	71.0	66.8	61.2	54.3	45.9	39.0	36.2	34.8
55°	1979.3	1192.9	79.3	65.4	59.9	55.7	45.9	37.6	30.6	26.4	25.1
57.5°	1950.1	1046.7	71.0	58.5	52.9	47.3	39.0	29.2	22.3	18.1	18.1
60°	1869.4	893.6	61.2	51.5	45.9	39.0	30.6	20.9	13.9	9.7	9.7
62.5°	1766.4	711.3	52.9	43.2	37.6	32.0	23.7	13.9	5.6	2.8	2.8
65°	1586.8	524.8	45.9	36.2	29.2	23.7	15.3	5.6	0.0	0.0	0.0
67.5°	1309.8	350.8	36.2	29.2	25.1	16.7	9.7	1.4	0.0	0.0	0.0
70°	921.5	199.0	27.8	20.9	18.1	11.1	2.8	0.0	0.0	0.0	0.0
72.5°	378.6	87.7	19.5	15.3	12.5	5.6	0.0	0.0	0.0	0.0	0.0
75°	103.0	39.0	12.5	8.4	7.0	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	59.9	26.4	5.6	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	47.3	12.5	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	47.3	7.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	40.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	0.0	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)