

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: P677221

Luminaire Tested: **CCW-SA-2A-850-U-SL4-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677221
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2A-850-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/
SL4 distribution lens and House Side Shield
Light Source: (32) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

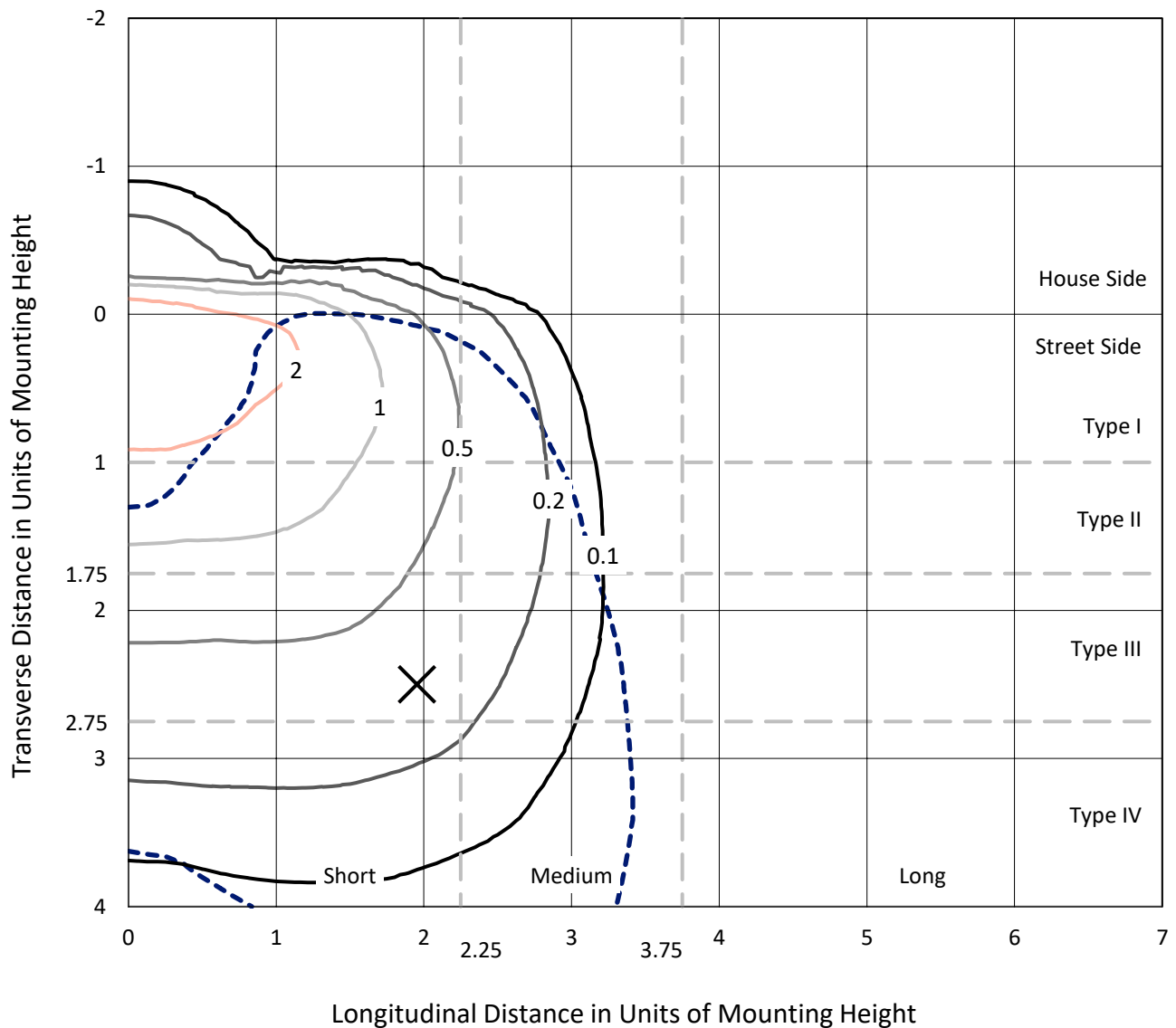
Lumens per Lamp: N/A
Luminaire Lumens: 3943.9 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 36.2
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

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Iso-Footcandle Lines of Horizontal Illumination

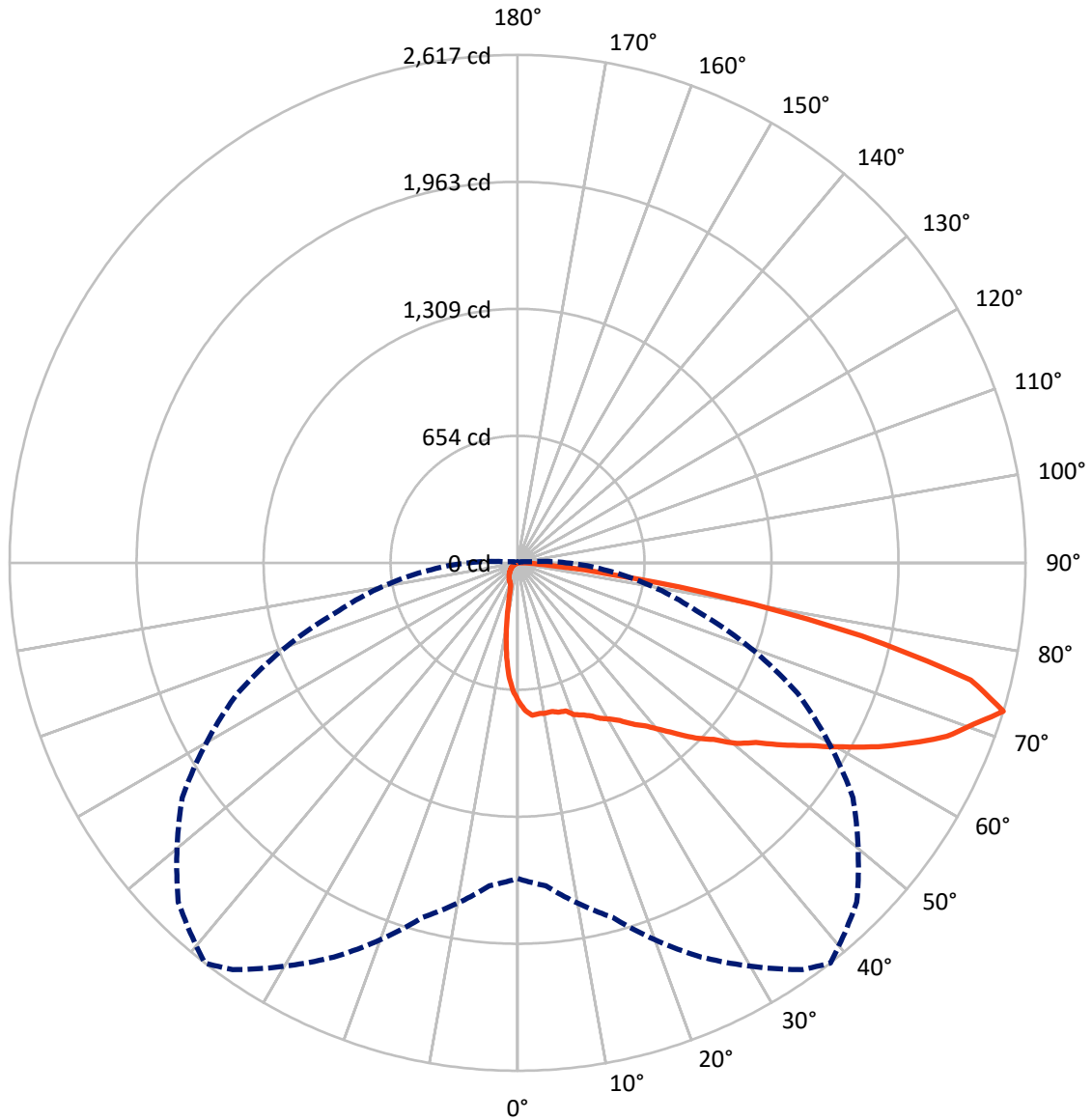
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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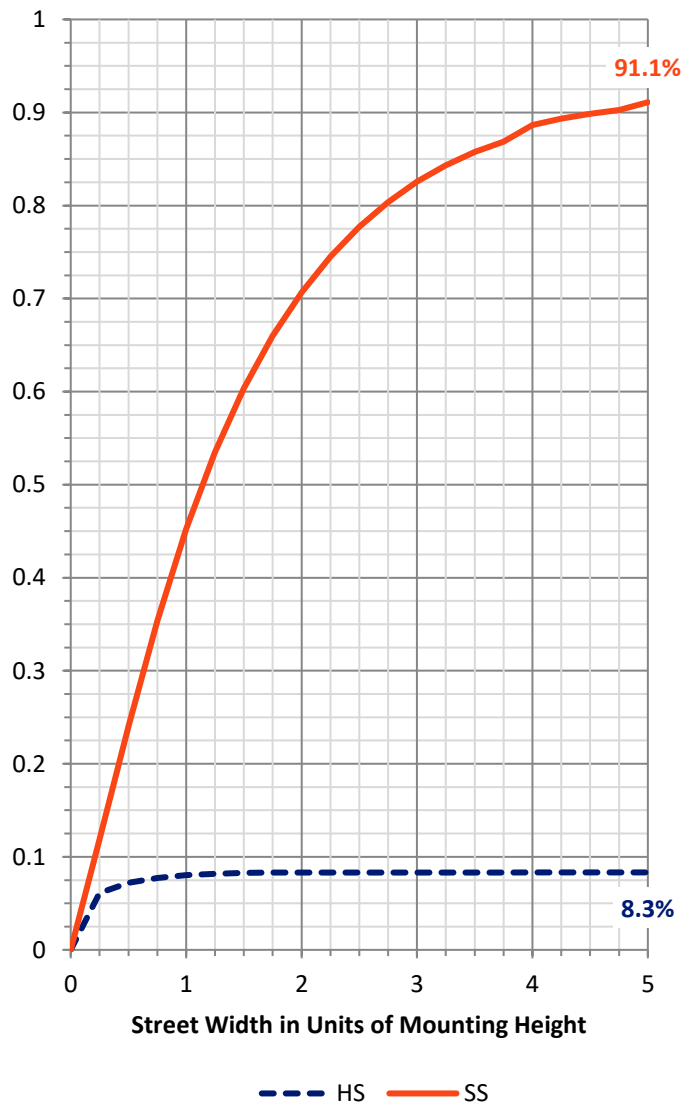
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	330.3	0.0	330.3
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	3613.6	0.0	3613.6
	% Fixture	91.6	0.0	91.6
Total	Lumens	3943.9	0.0	3943.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	1.6
10°-20°	152.8	3.9
20°-30°	245.0	6.2
30°-40°	369.9	9.4
40°-50°	563.0	14.3
50°-60°	792.7	20.1
60°-70°	968.3	24.6
70°-80°	703.1	17.8
80°-90°	86.6	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°	3943.9	100.0
0°-180°	3943.9	100.0

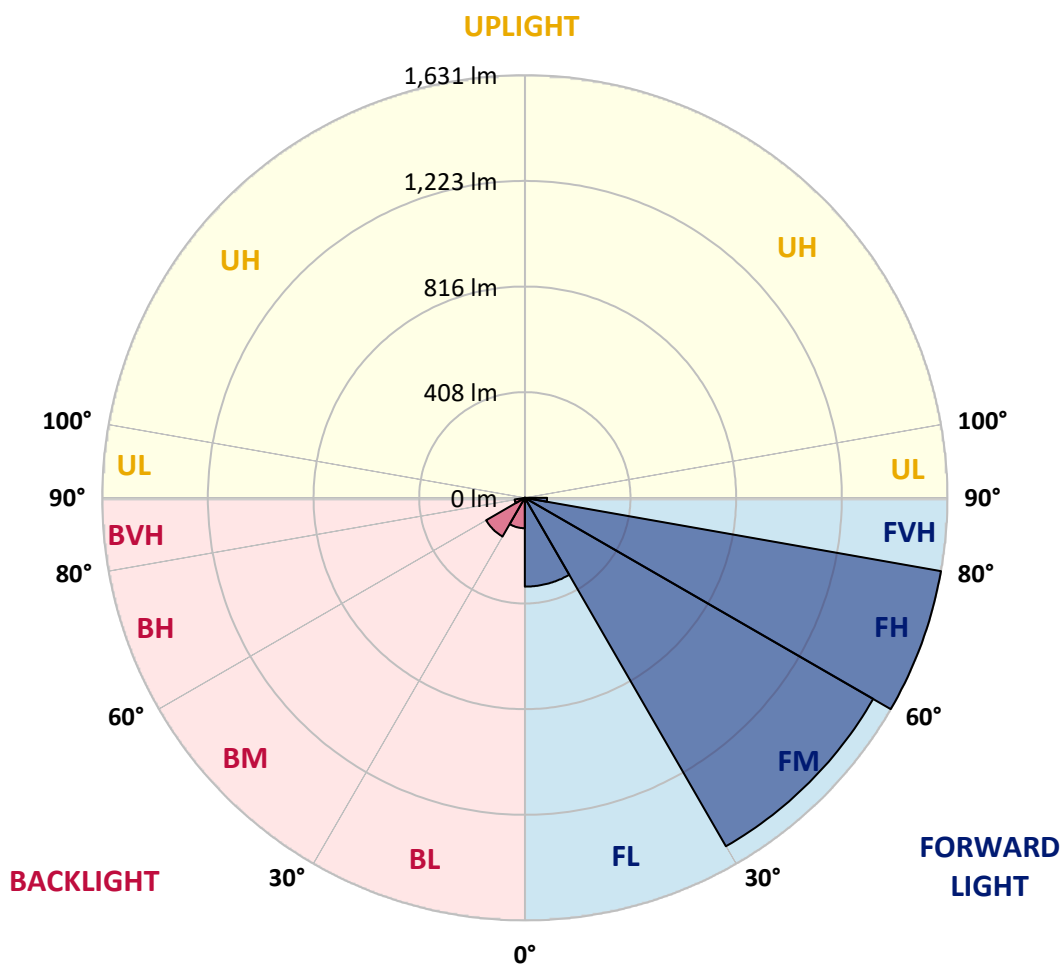


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	343.0	8.7			
FM (30°-60°)	1553.1	39.4			
FH (60°-80°)	1631.3	41.4			G1/1800
FVH (80°-90°)	86.1	2.2			G1/100
BL (0°-30°)	117.3	3.0	B1/500		
BM (30°-60°)	172.6	4.4	B0/220		
BH (60°-80°)	40.1	1.0	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: B1-U0-G1
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2
2.5°	783.5	783.5	790.9	783.5	780.7	763.2	764.1	754.8	745.6	732.6	720.6
5°	792.8	799.2	803.9	797.4	787.2	789.1	795.5	778.0	753.0	737.3	710.4
7.5°	789.1	802.9	799.2	795.5	789.1	784.4	775.2	767.8	755.8	741.0	709.5
10°	786.3	790.9	791.8	789.1	775.2	788.1	778.0	765.9	751.1	733.6	694.7
12.5°	776.1	776.1	784.4	778.0	779.8	786.3	781.7	778.9	763.2	748.4	714.1
15°	765.0	768.7	781.7	791.8	801.1	798.3	795.5	787.2	773.3	756.7	720.6
17.5°	767.8	769.6	790.0	808.5	803.9	802.0	816.8	799.2	785.4	766.9	726.2
20°	778.0	783.5	806.6	830.7	835.3	835.3	829.8	819.6	800.2	775.2	736.3
22.5°	788.1	790.0	827.9	858.4	863.1	851.0	855.7	826.1	807.6	793.7	746.5
25°	827.0	823.3	864.0	888.0	885.3	873.2	868.6	842.7	835.3	810.3	768.7
27.5°	879.7	864.0	903.8	918.6	903.8	907.5	894.5	866.8	851.0	836.2	778.9
30°	912.1	921.3	942.6	957.4	932.4	933.4	926.9	896.4	872.3	876.0	813.1
32.5°	962.0	968.5	984.2	990.7	971.3	969.4	963.0	938.9	921.3	917.6	859.4
35°	1015.7	1027.7	1028.7	1030.5	1012.9	1020.3	1011.1	976.8	986.1	992.6	914.9
37.5°	1068.4	1057.3	1075.8	1084.2	1064.7	1064.7	1067.5	1044.4	1061.0	1080.5	993.5
40°	1088.8	1093.4	1125.8	1119.3	1142.4	1128.6	1138.7	1133.2	1147.1	1191.5	1104.5
42.5°	1110.1	1115.6	1159.1	1171.1	1198.9	1203.5	1218.3	1219.2	1259.9	1333.0	1210.9
45°	1150.8	1141.5	1200.7	1230.3	1275.6	1288.6	1306.2	1321.0	1384.8	1470.8	1332.1
47.5°	1187.8	1174.8	1242.3	1301.5	1357.0	1359.8	1407.9	1423.6	1499.5	1597.6	1452.3
50°	1239.6	1244.2	1272.9	1374.6	1431.0	1463.4	1496.7	1548.5	1632.7	1737.2	1539.3
52.5°	1293.2	1288.6	1336.7	1436.6	1525.4	1537.4	1612.4	1670.6	1762.2	1840.8	1578.1
55°	1358.9	1364.4	1382.9	1514.3	1627.2	1655.8	1740.0	1801.1	1901.0	1885.2	1591.1
57.5°	1424.6	1419.0	1460.6	1601.3	1754.8	1776.1	1888.0	1924.1	1991.6	1914.8	1558.7
60°	1489.3	1499.5	1517.1	1699.3	1894.5	1925.9	2014.8	2033.3	2048.1	1928.7	1533.7
62.5°	1563.3	1539.3	1593.9	1802.9	2020.3	2086.0	2156.3	2083.2	2070.3	1903.7	1476.4
65°	1600.3	1607.7	1679.0	1921.3	2187.7	2235.8	2245.1	2150.7	2084.1	1848.2	1422.7
67.5°	1657.7	1667.9	1758.5	2042.5	2359.8	2386.6	2353.3	2211.8	2072.1	1776.1	1229.4
70°	1665.1	1690.1	1864.9	2169.2	2468.0	2491.2	2465.2	2252.5	1975.0	1492.1	910.2
72.5°	1626.2	1670.6	1890.8	2241.4	2558.7	2617.0	2471.7	2109.1	1592.0	951.9	466.2
75°	1228.5	1265.5	1730.8	2134.1	2397.7	2411.6	2170.2	1609.6	906.5	324.7	119.3
77.5°	636.4	700.3	1155.4	1630.9	1827.0	1812.2	1510.6	948.2	311.7	85.1	48.1
80°	365.4	381.1	505.1	915.8	1148.9	1092.5	835.3	408.9	136.9	42.6	31.5
82.5°	180.4	202.6	272.0	409.8	574.5	472.7	313.6	245.1	76.8	23.1	27.8
85°	38.9	40.7	138.8	196.1	233.1	153.6	107.3	206.3	27.8	13.9	26.8
87.5°	27.8	26.8	38.9	87.9	64.8	39.8	63.8	108.2	6.5	6.5	5.6
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°	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2	713.2
2.5°	713.2	704.9	695.6	678.1	673.4	670.7	654.9	654.0	651.2	644.8	642.0
5°	693.8	679.9	662.3	643.8	629.0	602.2	569.8	553.2	532.8	533.8	527.3
7.5°	691.0	665.1	640.1	601.3	554.1	504.2	454.2	421.8	398.7	384.8	387.6
10°	678.1	658.6	617.9	545.8	469.9	394.1	330.2	282.1	254.4	233.1	239.6
12.5°	683.6	645.7	588.3	492.1	383.9	290.5	210.9	164.7	144.3	136.9	138.8
15°	679.9	645.7	570.8	433.8	301.6	197.0	136.9	122.1	118.4	118.4	116.6
17.5°	691.0	653.1	541.2	376.5	216.5	131.4	117.5	114.7	111.9	111.9	111.9
20°	706.7	656.8	520.8	312.7	152.6	115.6	110.1	108.2	107.3	107.3	106.4
22.5°	707.7	653.1	482.9	242.4	117.5	109.2	104.5	103.6	103.6	101.8	101.8
25°	713.2	656.8	442.2	182.2	109.2	102.7	99.0	98.1	99.0	98.1	97.1
27.5°	727.1	663.3	401.5	133.2	102.7	97.1	94.4	93.4	93.4	93.4	91.6
30°	744.7	663.3	356.1	110.1	97.1	91.6	88.8	87.9	87.0	87.0	87.0
32.5°	781.7	684.5	300.6	98.1	89.7	85.1	82.3	82.3	81.4	81.4	80.5
35°	827.9	699.3	244.2	90.7	83.3	78.6	75.9	75.9	74.9	74.9	74.0
37.5°	885.3	736.3	186.9	85.1	76.8	72.2	69.4	69.4	69.4	68.5	68.5
40°	966.7	774.3	138.8	77.7	70.3	65.7	63.8	62.9	62.0	62.0	60.1
42.5°	1053.6	832.5	103.6	72.2	64.8	61.1	58.3	55.5	55.5	52.7	52.7
45°	1148.0	883.4	84.2	65.7	59.2	54.6	51.8	50.0	47.2	45.3	45.3
47.5°	1240.5	914.9	74.0	58.3	53.7	50.0	47.2	43.5	39.8	38.9	37.9
50°	1315.4	924.1	65.7	52.7	49.0	45.3	41.6	37.0	33.3	31.5	30.5
52.5°	1315.4	873.2	59.2	47.2	44.4	40.7	36.1	30.5	25.9	24.1	23.1
55°	1315.4	792.8	52.7	43.5	39.8	37.0	30.5	25.0	20.4	17.6	16.7
57.5°	1296.0	695.6	47.2	38.9	35.2	31.5	25.9	19.4	14.8	12.0	12.0
60°	1242.3	593.9	40.7	34.2	30.5	25.9	20.4	13.9	9.3	6.5	6.5
62.5°	1173.9	472.7	35.2	28.7	25.0	21.3	15.7	9.3	3.7	1.9	1.9
65°	1054.6	348.7	30.5	24.1	19.4	15.7	10.2	3.7	0.0	0.0	0.0
67.5°	870.5	233.1	24.1	19.4	16.7	11.1	6.5	0.9	0.0	0.0	0.0
70°	612.4	132.3	18.5	13.9	12.0	7.4	1.9	0.0	0.0	0.0	0.0
72.5°	251.6	58.3	13.0	10.2	8.3	3.7	0.0	0.0	0.0	0.0	0.0
75°	68.5	25.9	8.3	5.6	4.6	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	39.8	17.6	3.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	31.5	8.3	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.5	4.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	26.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	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)