

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: P676615

Luminaire Tested: **CCW-SA-2D-830-U-T4FT-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676615
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2D-830-U-T4FT-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @800mA w/
T4FT distribution lens and House Side Shield
Light Source: (32) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

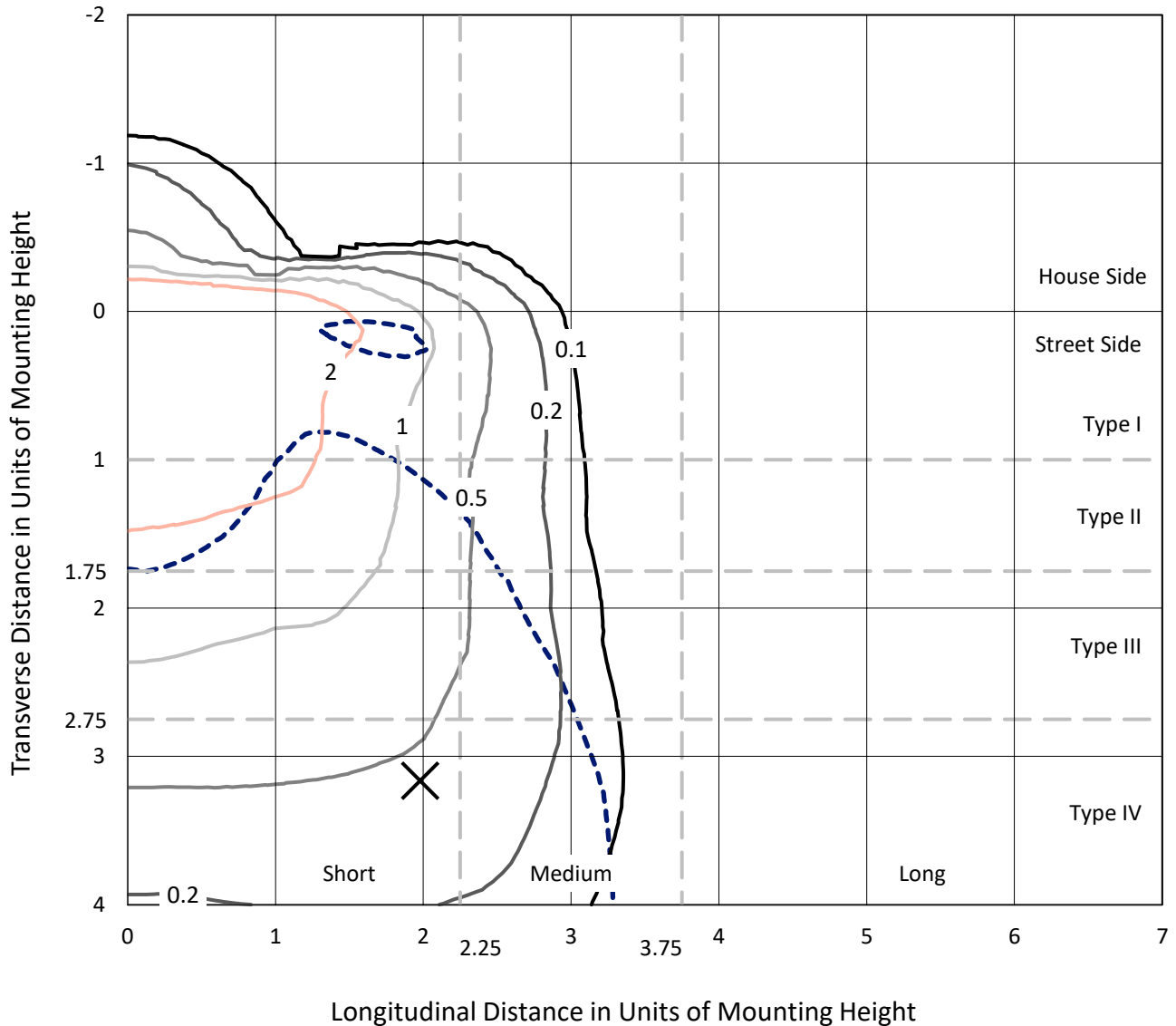
Lumens per Lamp: N/A
Luminaire Lumens: 6363.3 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 80.8
Input Voltage (V): 120
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: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

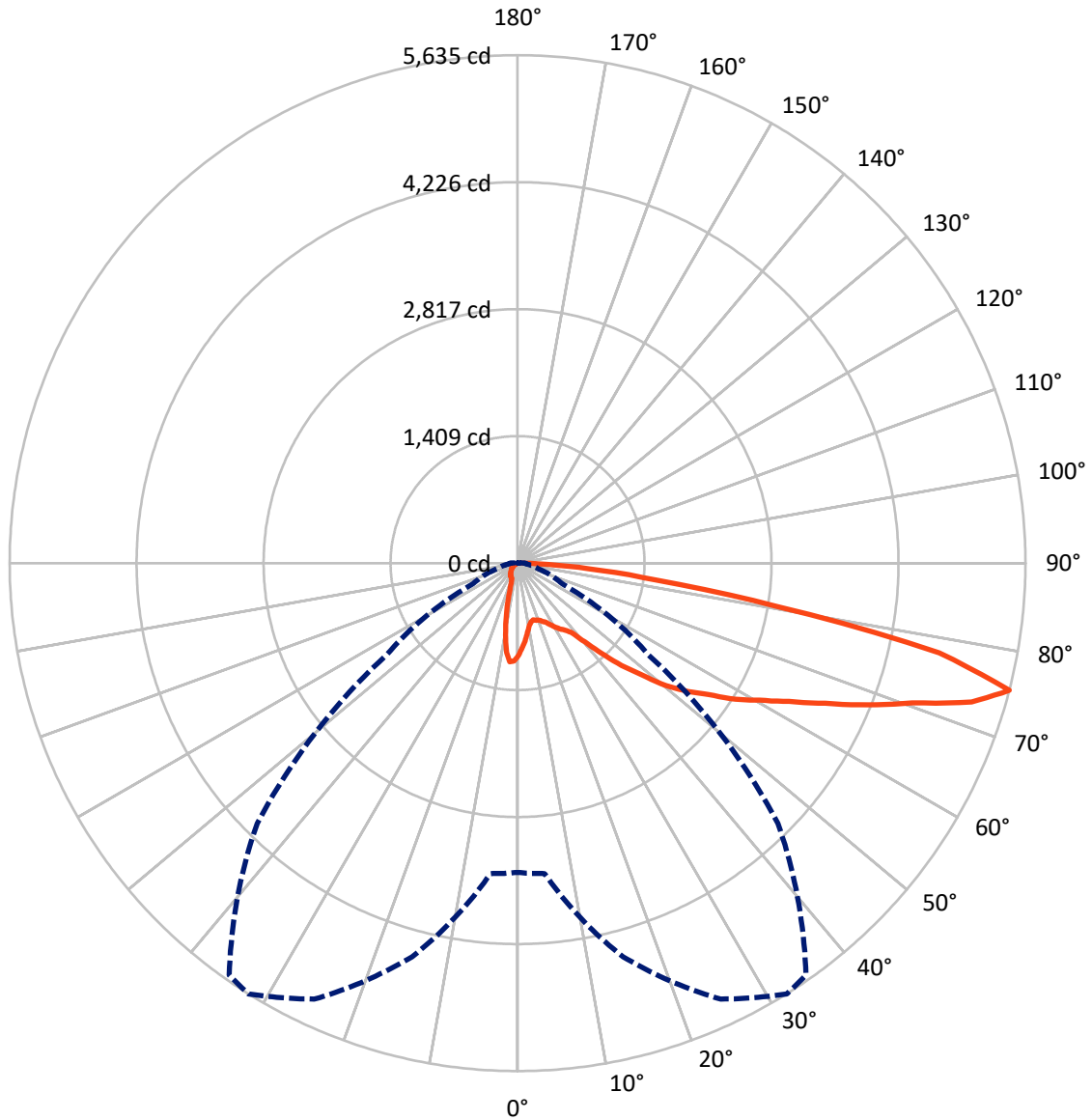
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	687.5	0.0	687.5
	% Fixture	10.8	0.0	10.8
Street Side	Lumens	5675.9	0.0	5675.9
	% Fixture	89.2	0.0	89.2
Total	Lumens	6363.3	0.0	6363.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.3	1.4
10°-20°	205.0	3.2
20°-30°	306.9	4.8
30°-40°	471.1	7.4
40°-50°	823.9	12.9
50°-60°	1287.9	20.2
60°-70°	1665.0	26.2
70°-80°	1356.1	21.3
80°-90°	157.0	2.5
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°	6363.3	100.0
0°-180°	6363.3	100.0



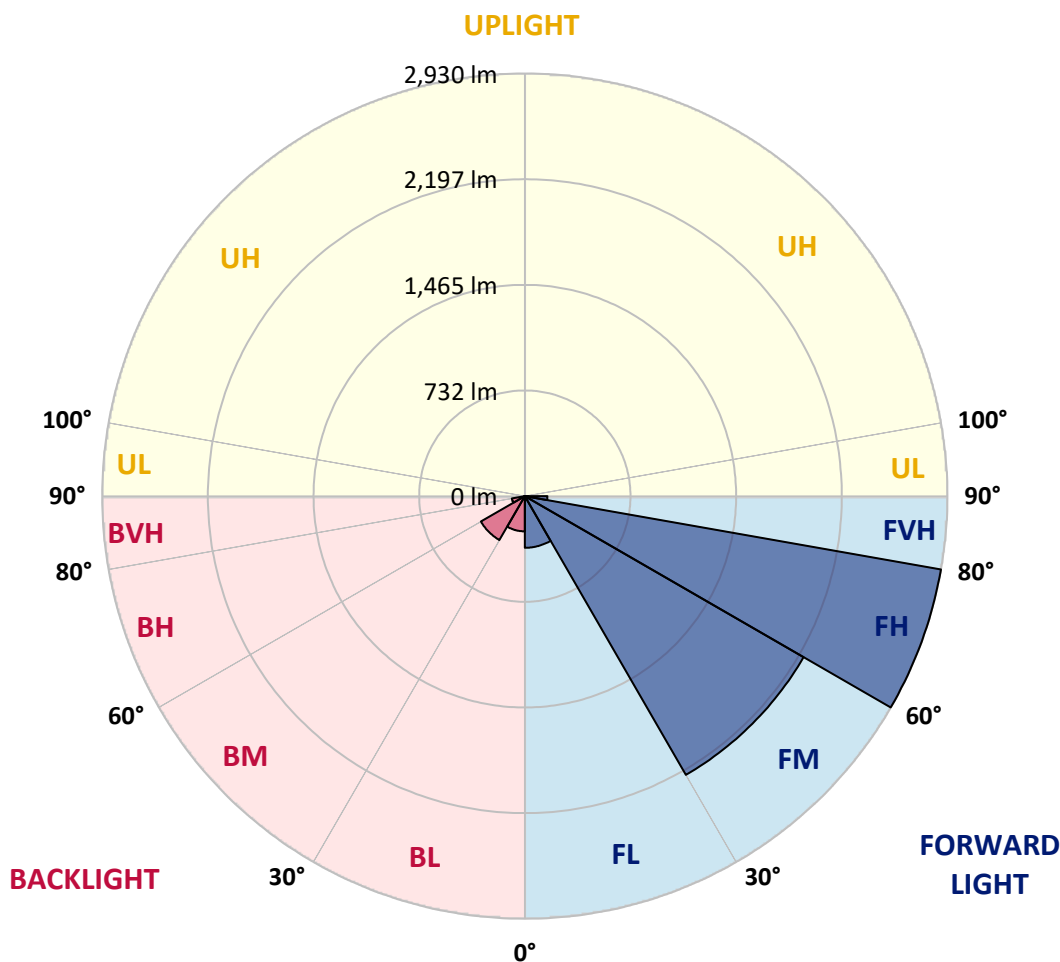
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	358.0	5.6			
FM (30°-60°)	2231.3	35.1			
FH (60°-80°)	2929.7	46.0			G2/5000
FVH (80°-90°)	156.9	2.5			G2/225
BL (0°-30°)	244.2	3.8	B1/500		
BM (30°-60°)	351.7	5.5	B1/1000		
BH (60°-80°)	91.4	1.4	B0/110		G0/110
BVH (80°-90°)	0.1	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5
2.5°	921.5	934.5	932.9	941.0	942.7	947.6	959.0	959.0	991.6	1014.4	1029.1
5°	838.3	830.1	833.4	843.2	867.7	866.0	893.7	908.4	947.6	980.2	1014.4
7.5°	735.5	733.9	740.4	763.3	781.2	795.9	825.2	862.8	914.9	963.9	1024.2
10°	670.3	667.0	680.1	686.6	707.8	717.6	763.3	822.0	884.0	954.1	1024.2
12.5°	655.6	644.2	650.7	649.1	668.7	673.6	717.6	789.4	864.4	950.8	1037.3
15°	663.8	655.6	649.1	649.1	654.0	657.3	704.6	768.2	853.0	955.7	1066.6
17.5°	689.9	685.0	665.4	645.8	667.0	667.0	696.4	763.3	854.6	970.4	1102.5
20°	720.9	716.0	681.7	658.9	673.6	689.9	720.9	774.7	859.5	981.8	1158.0
22.5°	755.1	755.1	707.8	681.7	701.3	702.9	758.4	810.6	879.1	1011.2	1193.8
25°	797.5	794.3	748.6	719.2	725.8	743.7	794.3	849.7	914.9	1051.9	1260.7
27.5°	853.0	848.1	794.3	764.9	773.1	792.6	849.7	905.2	947.6	1068.3	1317.8
30°	898.6	893.7	849.7	805.7	823.6	841.6	908.4	957.4	988.3	1099.2	1383.0
32.5°	908.4	900.3	870.9	851.3	870.9	905.2	957.4	1007.9	1055.2	1177.5	1507.0
35°	1021.0	991.6	914.9	884.0	913.3	924.7	1011.2	1100.9	1146.5	1239.5	1645.6
37.5°	1236.2	1208.5	1107.4	1021.0	980.2	993.2	1105.8	1216.7	1260.7	1355.3	1797.3
40°	1500.4	1454.8	1347.1	1231.3	1148.2	1131.9	1205.3	1368.3	1410.7	1500.4	1996.2
42.5°	1802.2	1758.1	1591.8	1454.8	1370.0	1348.8	1360.2	1544.5	1580.4	1634.2	2126.7
45°	2019.1	1996.2	1808.7	1686.4	1619.5	1596.7	1568.9	1736.9	1782.6	1800.5	2315.9
47.5°	2144.7	2128.4	2024.0	1940.8	1851.1	1826.6	1844.6	2004.4	1973.4	1988.1	2496.9
50°	2312.6	2270.2	2128.4	2154.4	2136.5	2130.0	2161.0	2231.1	2185.4	2143.0	2694.3
52.5°	2448.0	2373.0	2273.5	2337.1	2364.8	2389.3	2498.6	2550.8	2346.9	2281.7	2821.5
55°	2531.2	2459.4	2485.5	2544.2	2573.6	2686.1	2815.0	2775.8	2452.9	2392.6	2991.1
57.5°	2606.2	2611.1	2681.2	2699.2	2849.2	2868.8	3116.7	2989.5	2527.9	2493.7	3058.0
60°	2787.2	2769.3	2826.4	2942.2	3085.7	3195.0	3431.5	3133.0	2565.4	2545.9	3040.0
62.5°	3113.4	3002.5	3022.1	3168.9	3379.3	3498.3	3612.5	3198.2	2555.7	2554.0	2986.2
65°	3527.7	3400.5	3341.8	3478.8	3751.1	3919.1	3816.4	3271.6	2490.4	2536.1	2785.6
67.5°	3871.8	3873.4	3764.2	3840.8	4196.4	4232.2	4008.8	3257.0	2381.1	2394.2	2296.3
70°	4268.1	4321.9	4225.7	4465.5	4643.2	4666.1	4229.0	3136.3	2146.3	1805.4	1319.4
72.5°	4369.2	4397.0	4697.1	5065.6	5266.3	5272.8	4445.9	2733.4	1412.4	797.5	409.4
75°	3431.5	3457.6	4520.9	5336.4	5634.8	5577.8	4083.8	1774.4	549.6	233.2	97.9
77.5°	1914.7	1922.9	2806.8	4313.8	4780.2	4550.3	2860.6	691.5	221.8	133.7	45.7
80°	523.5	614.9	1040.5	2126.7	2919.4	2865.5	1361.8	225.1	143.5	104.4	21.2
82.5°	125.6	135.4	334.3	941.0	1542.9	1609.7	406.1	114.2	99.5	86.4	11.4
85°	45.7	50.6	102.7	458.3	792.6	727.4	122.3	57.1	73.4	66.9	4.9
87.5°	16.3	16.3	32.6	150.0	231.6	174.5	40.8	19.6	37.5	40.8	1.6
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°	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5	1027.5
2.5°	1030.7	1030.7	1053.6	1073.1	1079.7	1087.8	1079.7	1097.6	1096.0	1087.8	1091.1
5°	1032.4	1061.7	1081.3	1094.3	1100.9	1099.2	1102.5	1082.9	1071.5	1063.4	1055.2
7.5°	1040.5	1068.3	1104.1	1100.9	1082.9	1045.4	1016.1	963.9	913.3	911.7	903.5
10°	1068.3	1092.7	1113.9	1100.9	1035.6	921.5	828.5	758.4	694.8	665.4	668.7
12.5°	1087.8	1133.5	1123.7	1056.8	921.5	771.4	634.4	531.7	474.6	420.8	420.8
15°	1128.6	1144.9	1141.6	993.2	781.2	601.8	435.5	331.1	270.7	246.3	243.0
17.5°	1167.7	1185.7	1130.2	897.0	642.6	404.5	264.2	205.5	197.3	194.1	195.7
20°	1216.7	1218.3	1120.4	800.8	482.8	256.1	189.2	184.3	185.9	184.3	184.3
22.5°	1268.9	1280.3	1086.2	665.4	321.3	185.9	176.1	177.8	177.8	177.8	182.7
25°	1337.4	1319.4	1032.4	536.6	210.4	171.2	171.2	172.9	172.9	172.9	174.5
27.5°	1383.0	1358.6	963.9	386.5	164.7	161.5	164.7	164.7	168.0	168.0	168.0
30°	1477.6	1414.0	877.4	249.5	148.4	153.3	156.6	159.8	161.5	164.7	166.4
32.5°	1551.0	1462.9	769.8	166.4	135.4	138.6	146.8	153.3	159.8	158.2	158.2
35°	1684.7	1542.9	670.3	132.1	124.0	124.0	132.1	143.5	153.3	156.6	156.6
37.5°	1838.1	1608.1	531.7	120.7	114.2	114.2	119.1	132.1	145.2	151.7	148.4
40°	1965.3	1683.1	393.1	112.5	106.0	106.0	109.3	119.1	133.7	145.2	146.8
42.5°	2055.0	1738.6	265.8	104.4	99.5	97.9	102.7	107.6	119.1	135.4	138.6
45°	2136.5	1767.9	164.7	96.2	93.0	93.0	93.0	97.9	106.0	120.7	124.0
47.5°	2281.7	1800.5	119.1	89.7	84.8	86.4	88.1	89.7	96.2	99.5	101.1
50°	2404.0	1825.0	97.9	83.2	79.9	81.5	81.5	81.5	84.8	79.9	79.9
52.5°	2496.9	1800.5	83.2	76.7	73.4	75.0	73.4	73.4	70.1	63.6	63.6
55°	2565.4	1756.5	66.9	70.1	70.1	70.1	66.9	62.0	55.5	50.6	50.6
57.5°	2583.4	1681.5	52.2	58.7	63.6	63.6	57.1	50.6	42.4	37.5	35.9
60°	2555.7	1518.4	39.1	42.4	48.9	50.6	45.7	37.5	29.4	24.5	24.5
62.5°	2456.2	1389.5	31.0	27.7	35.9	37.5	32.6	24.5	16.3	11.4	9.8
65°	2267.0	1190.6	22.8	19.6	24.5	26.1	21.2	11.4	4.9	1.6	0.0
67.5°	1818.5	897.0	14.7	13.0	16.3	16.3	9.8	3.3	0.0	0.0	0.0
70°	1006.3	504.0	9.8	6.5	8.2	4.9	1.6	0.0	0.0	0.0	0.0
72.5°	290.3	143.5	4.9	3.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	78.3	34.2	3.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	34.2	13.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	14.7	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	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)