

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: P676638

Luminaire Tested: **CCW-SA-2E-840-U-T4FT-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676638
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2E-840-U-T4FT-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/
T4FT distribution lens and House Side Shield
Light Source: (32) 4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

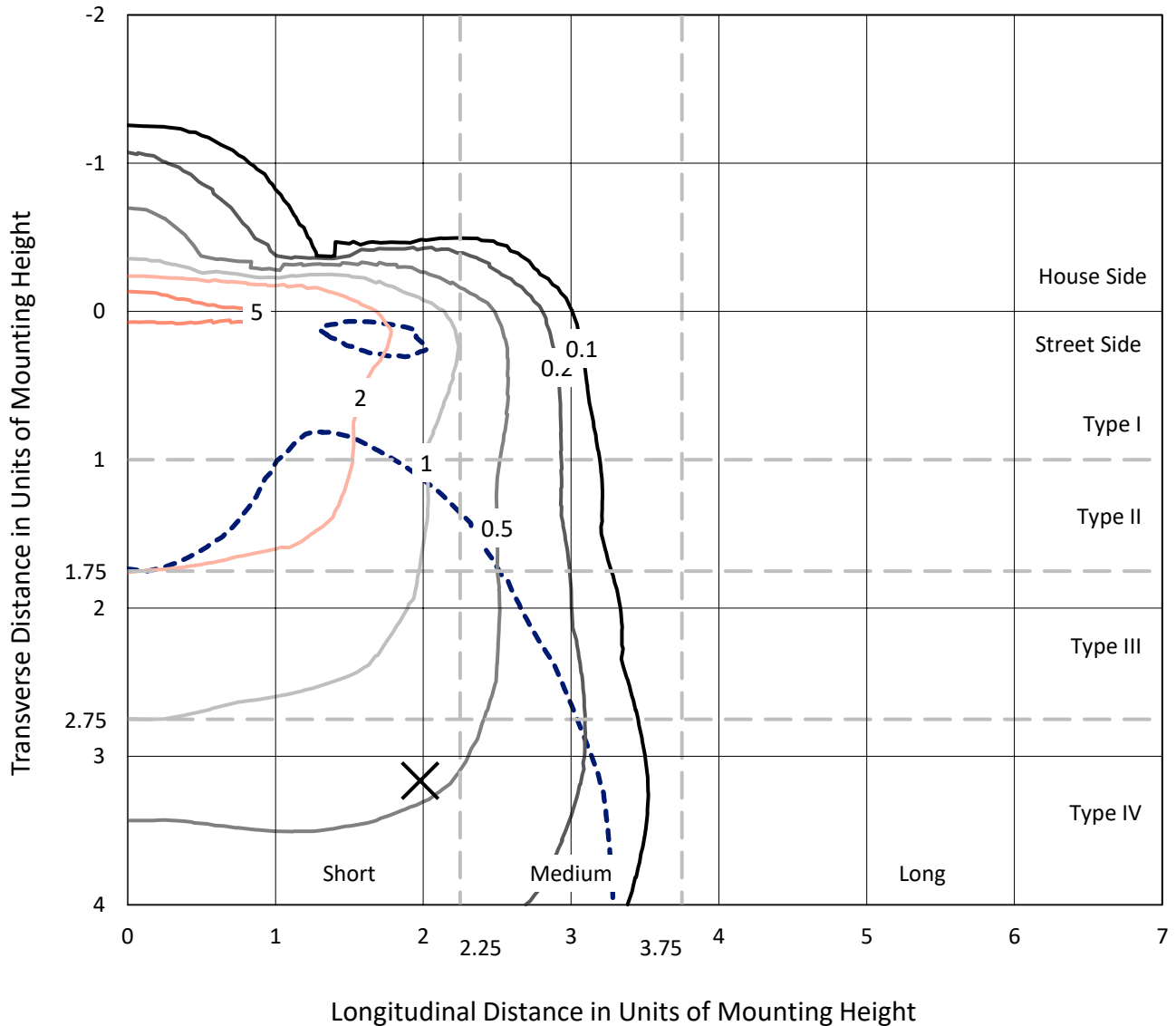
Lumens per Lamp: N/A
Luminaire Lumens: 8370.8 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 106.6
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

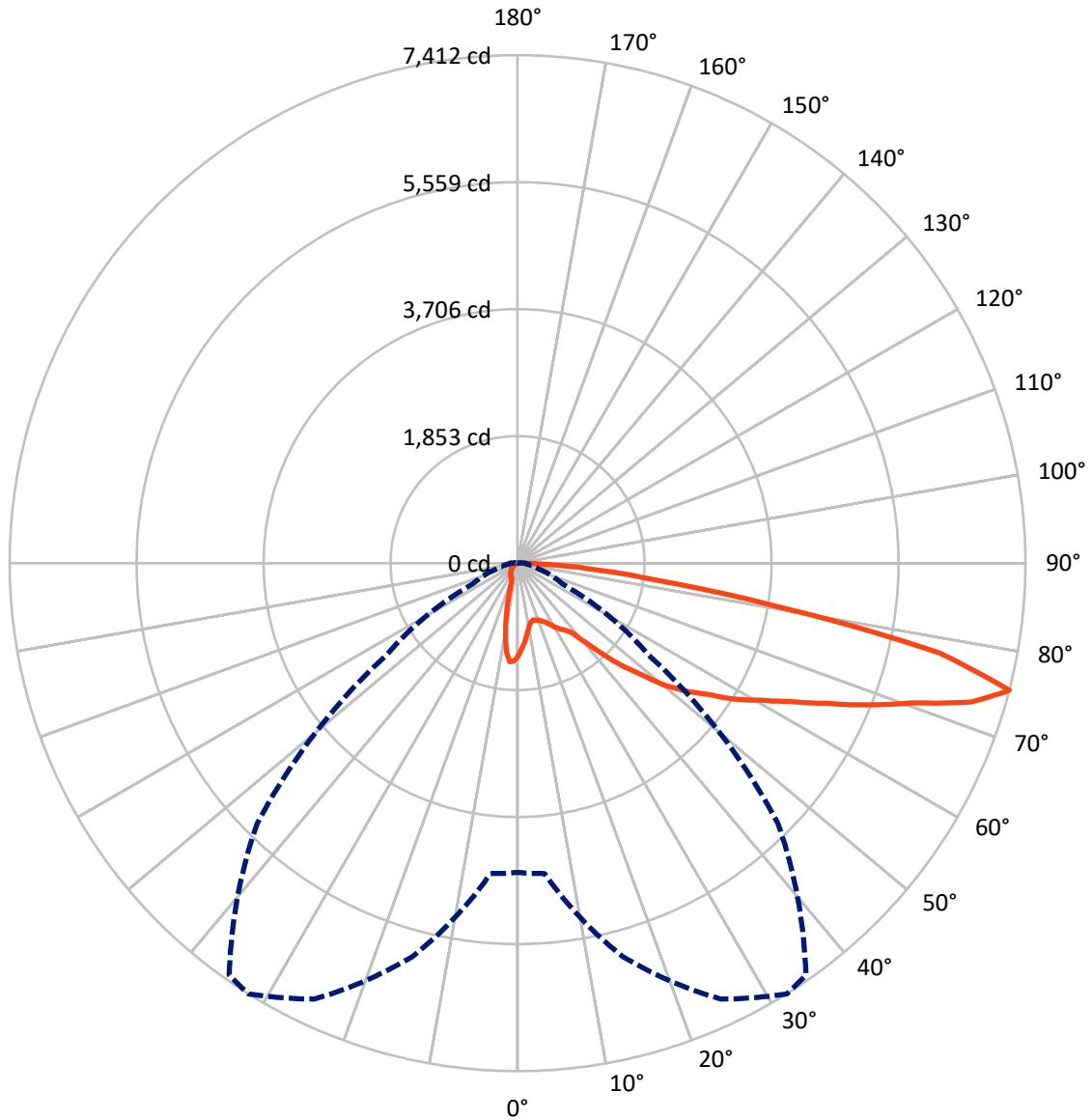
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 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	904.3	0.0	904.3
	% Fixture	10.8	0.0	10.8
Street Side	Lumens	7466.4	0.0	7466.4
	% Fixture	89.2	0.0	89.2
Total	Lumens	8370.8	0.0	8370.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.8	1.4
10°-20°	269.7	3.2
20°-30°	403.8	4.8
30°-40°	619.8	7.4
40°-50°	1083.8	12.9
50°-60°	1694.2	20.2
60°-70°	2190.3	26.2
70°-80°	1783.9	21.3
80°-90°	206.5	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°	8370.8	100.0
0°-180°	8370.8	100.0



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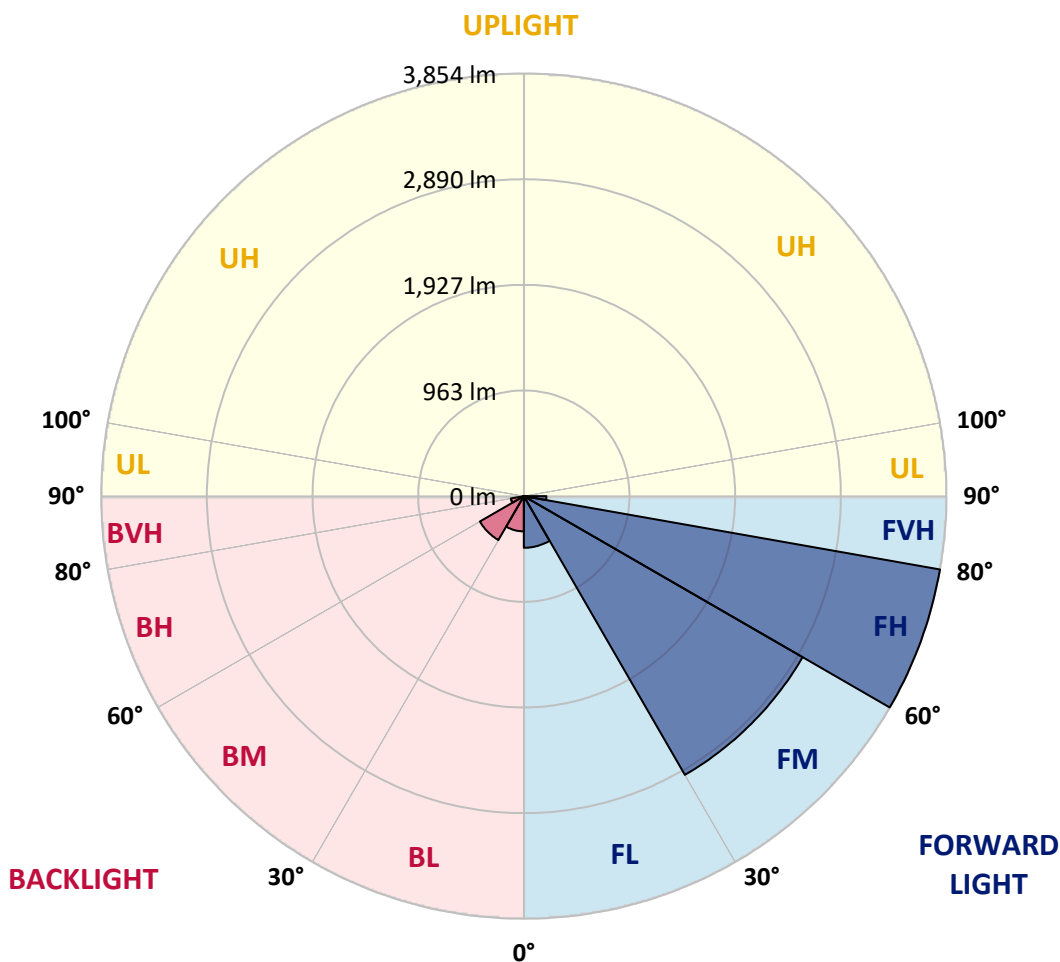
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	471.0	5.6			
FM (30°-60°)	2935.1	35.1			
FH (60°-80°)	3854.0	46.0			G2/5000
FVH (80°-90°)	206.3	2.5			G2/225
BL (0°-30°)	321.2	3.8	B1/500		
BM (30°-60°)	462.6	5.5	B1/1000		
BH (60°-80°)	120.3	1.4	B1/500		G1/500
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: 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°	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6
2.5°	1212.2	1229.3	1227.2	1237.9	1240.1	1246.5	1261.5	1261.5	1304.4	1334.5	1353.8
5°	1102.7	1092.0	1096.3	1109.2	1141.4	1139.2	1175.7	1195.0	1246.5	1289.4	1334.5
7.5°	967.6	965.4	974.0	1004.1	1027.7	1047.0	1085.6	1134.9	1203.6	1267.9	1347.3
10°	881.8	877.5	894.6	903.2	931.1	944.0	1004.1	1081.3	1162.8	1255.1	1347.3
12.5°	862.5	847.4	856.0	853.9	879.6	886.1	944.0	1038.4	1137.1	1250.8	1364.5
15°	873.2	862.5	853.9	853.9	860.3	864.6	926.8	1010.5	1122.1	1257.2	1403.1
17.5°	907.5	901.1	875.3	849.6	877.5	877.5	916.1	1004.1	1124.2	1276.5	1450.3
20°	948.3	941.8	896.8	866.8	886.1	907.5	948.3	1019.1	1130.6	1291.5	1523.2
22.5°	993.3	993.3	931.1	896.8	922.5	924.7	997.6	1066.3	1156.4	1330.2	1570.4
25°	1049.1	1044.8	984.7	946.1	954.7	978.3	1044.8	1117.8	1203.6	1383.8	1658.4
27.5°	1122.1	1115.6	1044.8	1006.2	1016.9	1042.7	1117.8	1190.7	1246.5	1405.3	1733.5
30°	1182.1	1175.7	1117.8	1059.8	1083.4	1107.0	1195.0	1259.4	1300.1	1446.0	1819.3
32.5°	1195.0	1184.3	1145.7	1119.9	1145.7	1190.7	1259.4	1325.9	1388.1	1549.0	1982.4
35°	1343.0	1304.4	1203.6	1162.8	1201.4	1216.5	1330.2	1448.2	1508.2	1630.5	2164.7
37.5°	1626.2	1589.8	1456.7	1343.0	1289.4	1306.6	1454.6	1600.5	1658.4	1782.8	2364.3
40°	1973.8	1913.7	1772.1	1619.8	1510.4	1488.9	1585.5	1800.0	1855.8	1973.8	2626.0
42.5°	2370.7	2312.8	2093.9	1913.7	1802.2	1774.3	1789.3	2031.7	2078.9	2149.7	2797.6
45°	2656.0	2626.0	2379.3	2218.4	2130.4	2100.4	2063.9	2284.9	2344.9	2368.5	3046.5
47.5°	2821.2	2799.8	2662.5	2553.1	2435.1	2402.9	2426.5	2636.7	2596.0	2615.3	3284.6
50°	3042.2	2986.4	2799.8	2834.1	2810.5	2801.9	2842.7	2934.9	2874.9	2819.1	3544.2
52.5°	3220.3	3121.6	2990.7	3074.4	3110.9	3143.0	3286.8	3355.4	3087.3	3001.4	3711.6
55°	3329.7	3235.3	3269.6	3346.9	3385.5	3533.5	3703.0	3651.5	3226.7	3147.3	3934.7
57.5°	3428.4	3434.8	3527.1	3550.7	3748.1	3773.8	4099.9	3932.6	3325.4	3280.4	4022.7
60°	3666.5	3642.9	3718.0	3870.3	4059.1	4202.9	4514.0	4121.4	3374.7	3349.0	3999.1
62.5°	4095.6	3949.7	3975.5	4168.6	4445.3	4601.9	4752.1	4207.2	3361.9	3359.7	3928.3
65°	4640.5	4473.2	4396.0	4576.2	4934.5	5155.4	5020.3	4303.7	3276.1	3336.1	3664.4
67.5°	5093.2	5095.4	4951.6	5052.5	5520.2	5567.4	5273.4	4284.4	3132.3	3149.5	3020.8
70°	5614.6	5685.4	5558.8	5874.2	6108.0	6138.1	5563.1	4125.6	2823.4	2375.0	1735.6
72.5°	5747.6	5784.1	6178.8	6663.7	6927.6	6936.1	5848.4	3595.7	1857.9	1049.1	538.5
75°	4514.0	4548.3	5947.1	7019.8	7412.4	7337.3	5372.1	2334.2	723.0	306.8	128.7
77.5°	2518.7	2529.5	3692.3	5674.6	6288.2	5985.7	3763.1	909.7	291.8	175.9	60.1
80°	688.7	808.8	1368.8	2797.6	3840.3	3769.5	1791.4	296.1	188.8	137.3	27.9
82.5°	165.2	178.1	439.8	1237.9	2029.6	2117.5	534.2	150.2	130.9	113.7	15.0
85°	60.1	66.5	135.2	602.9	1042.7	956.9	160.9	75.1	96.5	88.0	6.4
87.5°	21.5	21.5	42.9	197.4	304.6	229.6	53.6	25.7	49.3	53.6	2.1
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°	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6	1351.6
2.5°	1355.9	1355.9	1385.9	1411.7	1420.3	1431.0	1420.3	1443.9	1441.7	1431.0	1435.3
5°	1358.1	1396.7	1422.4	1439.6	1448.2	1446.0	1450.3	1424.6	1409.5	1398.8	1388.1
7.5°	1368.8	1405.3	1452.5	1448.2	1424.6	1375.2	1336.6	1267.9	1201.4	1199.3	1188.6
10°	1405.3	1437.4	1465.3	1448.2	1362.3	1212.2	1089.9	997.6	913.9	875.3	879.6
12.5°	1431.0	1491.1	1478.2	1390.2	1212.2	1014.8	834.6	699.4	624.3	553.5	553.5
15°	1484.6	1506.1	1501.8	1306.6	1027.7	791.7	572.8	435.5	356.1	324.0	319.7
17.5°	1536.1	1559.7	1486.8	1180.0	845.3	532.1	347.6	270.3	259.6	255.3	257.5
20°	1600.5	1602.6	1473.9	1053.4	635.0	336.8	248.9	242.4	244.6	242.4	242.4
22.5°	1669.1	1684.2	1428.9	875.3	422.6	244.6	231.7	233.9	233.9	233.9	240.3
25°	1759.2	1735.6	1358.1	705.8	276.8	225.3	225.3	227.4	227.4	227.4	229.6
27.5°	1819.3	1787.1	1267.9	508.5	216.7	212.4	216.7	216.7	221.0	221.0	221.0
30°	1943.8	1860.1	1154.2	328.2	195.2	201.7	206.0	210.3	212.4	216.7	218.8
32.5°	2040.3	1924.4	1012.6	218.8	178.1	182.4	193.1	201.7	210.3	208.1	208.1
35°	2216.2	2029.6	881.8	173.8	163.1	163.1	173.8	188.8	201.7	206.0	206.0
37.5°	2417.9	2115.4	699.4	158.8	150.2	150.2	156.6	173.8	190.9	199.5	195.2
40°	2585.2	2214.1	517.0	148.0	139.5	139.5	143.7	156.6	175.9	190.9	193.1
42.5°	2703.2	2287.0	349.7	137.3	130.9	128.7	135.2	141.6	156.6	178.1	182.4
45°	2810.5	2325.6	216.7	126.6	122.3	122.3	122.3	128.7	139.5	158.8	163.1
47.5°	3001.4	2368.5	156.6	118.0	111.6	113.7	115.9	118.0	126.6	130.9	133.0
50°	3162.4	2400.7	128.7	109.4	105.1	107.3	107.3	107.3	111.6	105.1	105.1
52.5°	3284.6	2368.5	109.4	100.8	96.5	98.7	96.5	96.5	92.3	83.7	83.7
55°	3374.7	2310.6	88.0	92.3	92.3	92.3	88.0	81.5	72.9	66.5	66.5
57.5°	3398.3	2211.9	68.7	77.2	83.7	83.7	75.1	66.5	55.8	49.3	47.2
60°	3361.9	1997.4	51.5	55.8	64.4	66.5	60.1	49.3	38.6	32.2	32.2
62.5°	3231.0	1827.9	40.8	36.5	47.2	49.3	42.9	32.2	21.5	15.0	12.9
65°	2982.1	1566.2	30.0	25.7	32.2	34.3	27.9	15.0	6.4	2.1	0.0
67.5°	2392.1	1180.0	19.3	17.2	21.5	21.5	12.9	4.3	0.0	0.0	0.0
70°	1323.7	662.9	12.9	8.6	10.7	6.4	2.1	0.0	0.0	0.0	0.0
72.5°	381.9	188.8	6.4	4.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	103.0	45.1	4.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	45.1	17.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	19.3	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	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)