

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: McGRAW-EDISON

Report Number: P833578

Luminaire Tested: **TTN-D2-740-U-WQ-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833578
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-740-U-WQ-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND WIDE DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5609.9 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B3 - U3 - G2

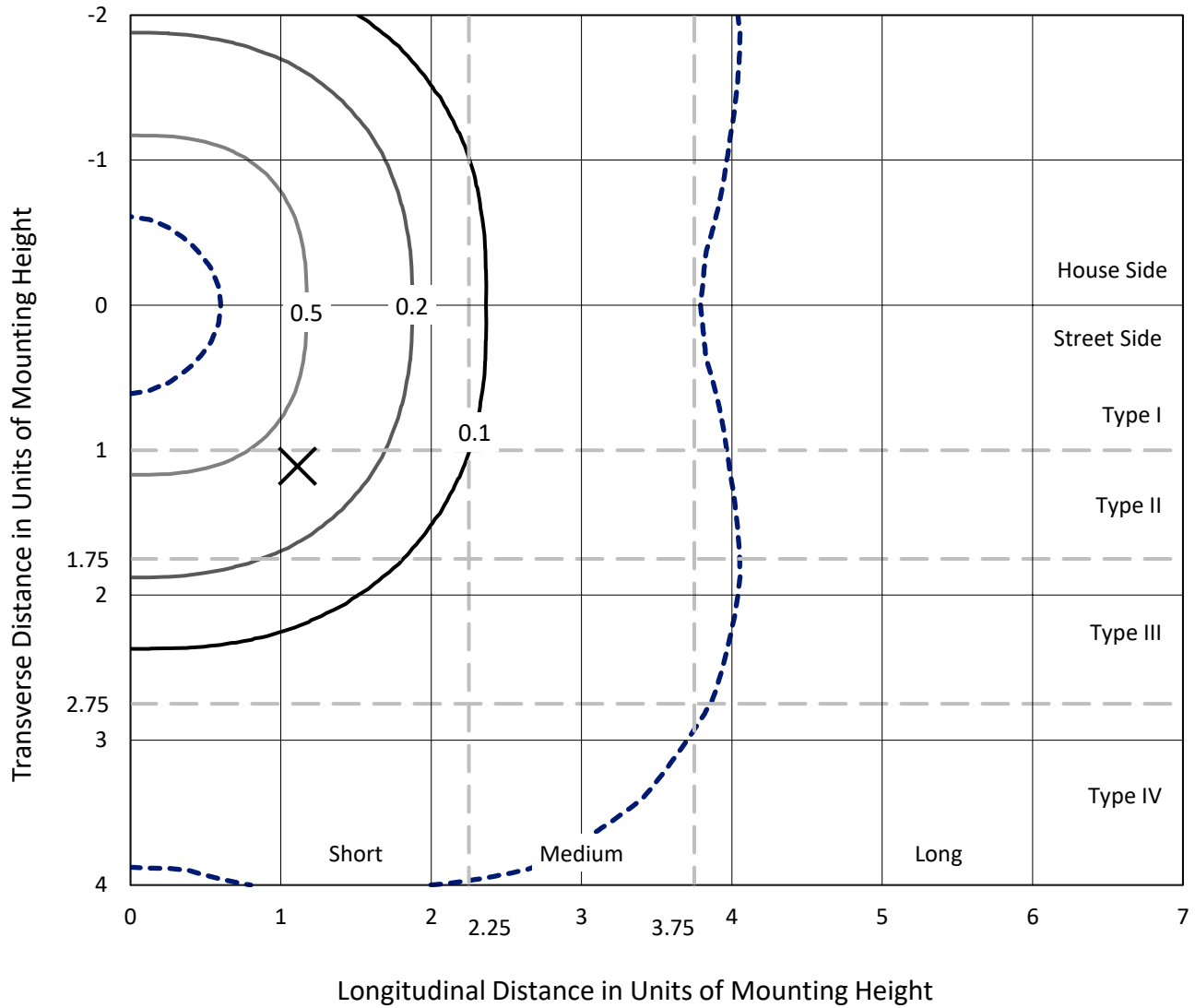
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

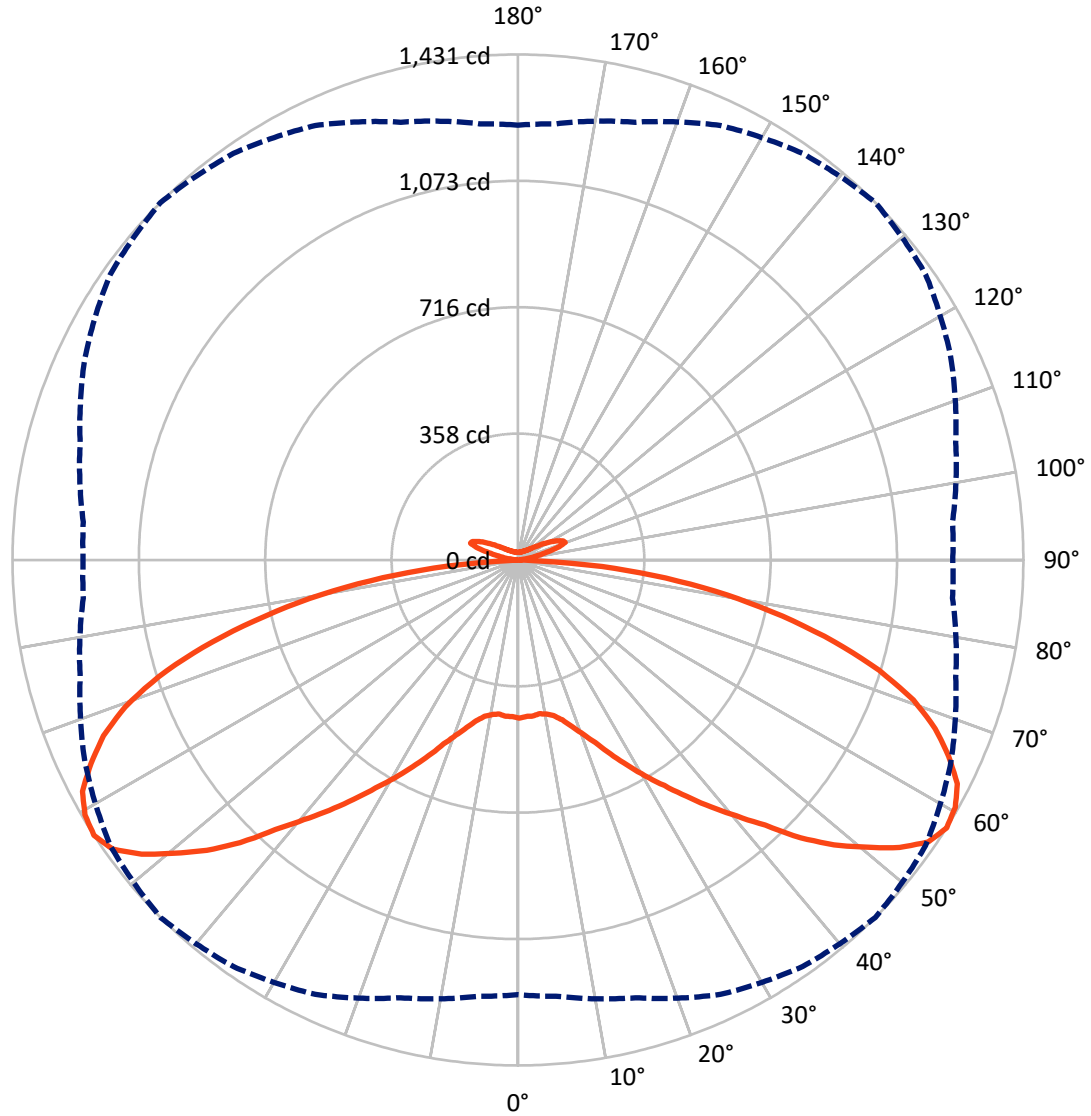
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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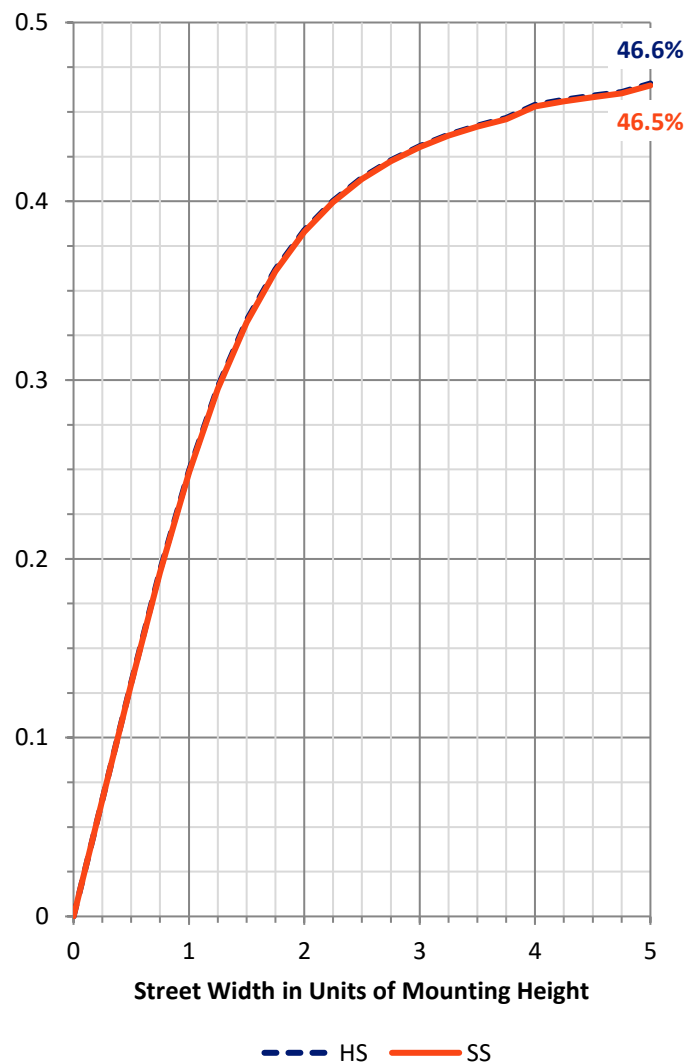
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2643.2	161.7	2805.0
	% Fixture	47.1	2.9	50.0
Street Side	Lumens	2643.2	161.7	2805.0
	% Fixture	47.1	2.9	50.0
Total	Lumens	5286.5	323.4	5609.9
	% Fixture	94.2	5.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	0.8
10°-20°	134.4	2.4
20°-30°	282.0	5.0
30°-40°	511.6	9.1
40°-50°	834.0	14.9
50°-60°	1167.3	20.8
60°-70°	1218.6	21.7
70°-80°	870.7	15.5
80°-90°	225.7	4.0
90°-100°	7.2	0.1
100°-110°	73.4	1.3
110°-120°	107.3	1.9
120°-130°	62.3	1.1
130°-140°	33.0	0.6
140°-150°	19.6	0.3
150°-160°	12.1	0.2
160°-170°	6.6	0.1
170°-180°	2.1	0.0
0°-90°	5286.5	94.2
0°-180°	5609.9	100.0

Coefficient of Utilization



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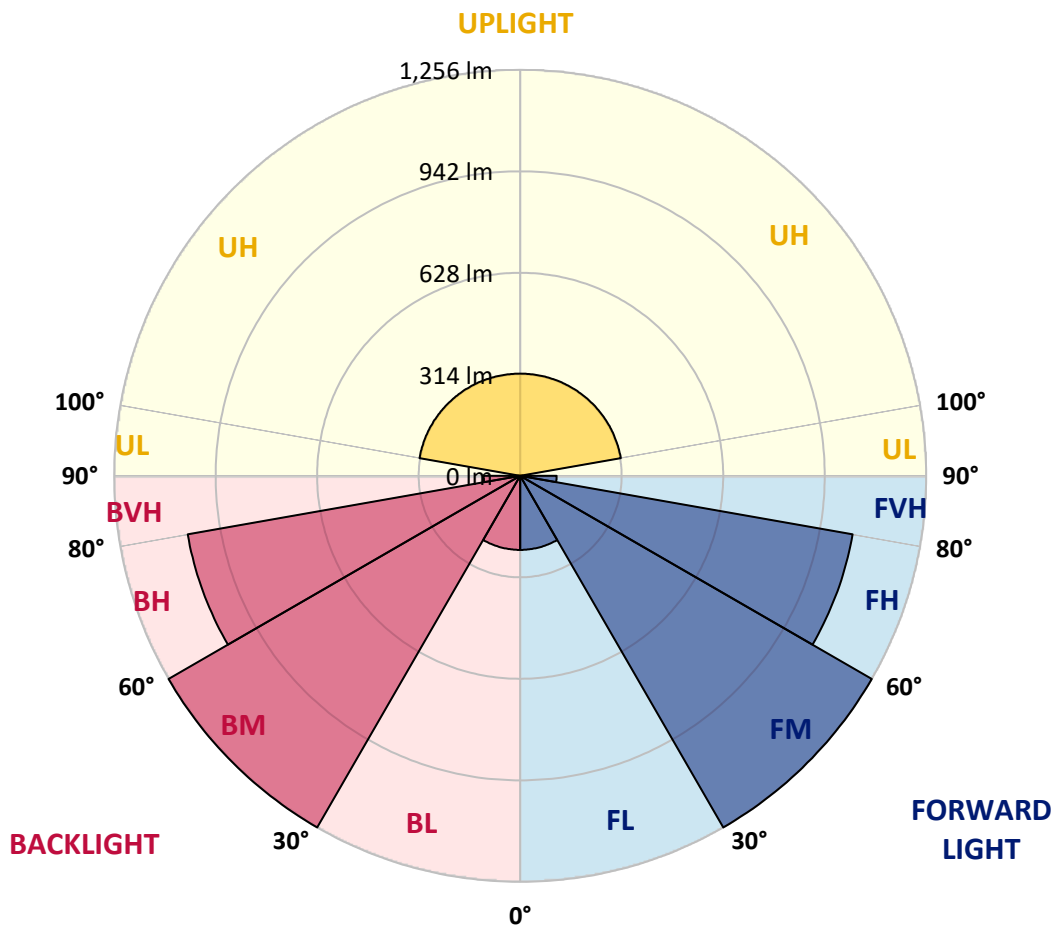
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.3	4.1			
FM (30°-60°)	1256.4	22.4			
FH (60°-80°)	1044.7	18.6			G1/1800
FVH (80°-90°)	112.9	2.0			G2/225
BL (0°-30°)	229.3	4.1	B1/500		
BM (30°-60°)	1256.4	22.4	B2/2500		
BH (60°-80°)	1044.7	18.6	B3/2500		G1/1800
BVH (80°-90°)	112.9	2.0			G2/225
UL (90°-100°)	7.2	0.1		U1/10	
UH (100°-180°)	316.2	5.6		U3/500	

BUG Rating: B3-U3-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1
2.5°	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7
5°	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7
7.5°	435.0	435.0	439.4	439.4	439.4	439.4	439.4	439.4	439.4	439.4	439.4
10°	435.0	435.0	439.4	439.4	443.7	443.7	443.7	439.4	439.4	435.0	435.0
12.5°	443.7	443.7	443.7	448.1	452.4	452.4	452.4	448.1	448.1	443.7	443.7
15°	456.8	461.1	461.1	465.5	469.8	469.8	469.8	465.5	465.5	461.1	461.1
17.5°	482.9	482.9	482.9	487.2	491.6	495.9	495.9	487.2	487.2	482.9	487.2
20°	509.0	513.3	513.3	517.7	522.0	526.4	522.0	517.7	513.3	513.3	513.3
22.5°	548.1	548.1	552.5	552.5	561.2	561.2	561.2	552.5	552.5	552.5	552.5
25°	591.6	591.6	596.0	600.3	609.0	609.0	604.7	596.0	596.0	596.0	600.3
27.5°	643.8	643.8	648.2	648.2	656.9	656.9	652.5	648.2	648.2	648.2	652.5
30°	691.7	691.7	700.4	704.7	709.1	709.1	709.1	700.4	700.4	696.0	696.0
32.5°	735.2	739.5	743.9	756.9	765.6	761.3	765.6	756.9	748.2	743.9	743.9
35°	783.0	787.4	796.1	809.1	822.2	822.2	822.2	809.1	800.4	791.7	796.1
37.5°	839.6	839.6	852.6	865.7	883.1	887.4	883.1	870.0	857.0	848.3	848.3
40°	900.5	900.5	913.5	926.6	948.3	952.7	948.3	930.9	913.5	909.2	909.2
42.5°	961.4	961.4	978.8	991.8	1017.9	1026.6	1017.9	996.2	978.8	965.7	970.1
45°	1026.6	1031.0	1052.7	1078.8	1109.3	1122.3	1109.3	1083.2	1057.1	1031.0	1031.0
47.5°	1100.6	1100.6	1126.7	1157.1	1191.9	1205.0	1187.6	1161.5	1126.7	1104.9	1104.9
50°	1148.4	1152.8	1187.6	1226.7	1270.2	1278.9	1265.9	1226.7	1187.6	1157.1	1152.8
52.5°	1196.3	1200.6	1239.8	1296.3	1339.8	1352.9	1335.5	1296.3	1239.8	1200.6	1200.6
55°	1226.7	1235.4	1278.9	1339.8	1387.7	1409.4	1383.3	1339.8	1274.6	1231.1	1226.7
57.5°	1231.1	1239.8	1283.3	1357.2	1405.1	1431.2	1409.4	1352.9	1283.3	1235.4	1231.1
60°	1222.4	1226.7	1270.2	1348.5	1405.1	1422.5	1405.1	1344.2	1265.9	1226.7	1218.0
62.5°	1200.6	1209.3	1252.8	1318.1	1383.3	1396.4	1379.0	1313.7	1248.5	1200.6	1191.9
65°	1131.0	1139.7	1205.0	1270.2	1326.8	1339.8	1326.8	1270.2	1200.6	1131.0	1122.3
67.5°	1052.7	1057.1	1122.3	1200.6	1252.8	1274.6	1252.8	1205.0	1118.0	1052.7	1044.0
70°	970.1	974.4	1026.6	1109.3	1161.5	1187.6	1165.8	1113.6	1022.3	965.7	961.4
72.5°	874.4	874.4	926.6	991.8	1044.0	1070.1	1052.7	987.5	917.9	861.3	852.6
75°	743.9	748.2	804.8	852.6	909.2	926.6	909.2	857.0	791.7	735.2	726.5
77.5°	609.0	613.4	661.2	700.4	752.6	765.6	752.6	709.1	648.2	600.3	596.0
80°	461.1	465.5	504.6	539.4	582.9	600.3	587.3	543.8	495.9	452.4	439.4
82.5°	300.2	304.5	343.7	369.8	408.9	422.0	413.3	374.1	335.0	291.5	287.1
85°	134.9	139.2	174.0	195.8	226.2	239.3	230.6	195.8	165.3	126.2	117.5
87.5°	13.1	13.1	13.1	13.1	13.1	17.4	17.4	13.1	13.1	13.1	13.1
90°	2.8	2.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8	2.8
92.5°	2.8	2.8	2.8	3.9	4.4	3.9	4.4	3.3	3.3	2.8	2.8
95°	3.3	3.3	3.9	5.0	6.1	6.6	6.6	3.9	3.9	3.3	3.3
97.5°	4.4	5.0	5.0	6.1	10.0	18.3	11.1	5.5	5.5	5.0	4.4
100°	7.2	7.7	7.7	13.8	29.3	39.3	28.2	14.4	10.5	7.7	7.7
102.5°	23.2	24.3	29.9	44.8	66.4	60.3	50.9	48.1	33.2	26.6	25.5
105°	59.2	58.7	63.1	74.7	93.0	91.3	84.1	76.4	65.8	60.9	60.9
107.5°	78.0	78.0	81.9	91.9	105.7	123.4	125.1	99.0	86.9	81.3	80.8
110°	88.0	88.0	91.3	99.6	117.9	142.8	141.6	122.3	107.3	100.2	99.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	90.2	90.7	95.2	107.9	127.8	138.9	133.9	126.2	119.5	114.0	112.9
115°	93.5	93.5	98.5	110.7	121.7	126.2	120.6	114.5	110.1	107.9	109.0
117.5°	92.4	94.1	95.2	101.8	109.0	112.3	109.6	101.3	97.9	96.8	95.2
120°	85.8	85.8	86.9	90.2	94.1	95.7	94.6	89.1	86.3	85.8	84.7
122.5°	76.4	76.9	76.4	78.0	80.8	82.4	81.3	76.9	75.8	75.8	74.7
125°	67.0	67.0	66.4	67.5	69.2	68.6	69.2	67.0	66.4	66.4	65.8
127.5°	60.3	59.8	58.7	59.2	59.8	59.8	60.3	58.1	58.7	59.2	58.7
130°	53.7	53.7	52.6	52.6	52.6	51.5	52.6	51.5	52.0	52.6	53.1
132.5°	47.6	47.6	45.9	45.4	45.4	45.4	45.9	45.4	46.5	47.6	47.6
135°	42.6	42.6	40.9	41.5	41.5	40.9	41.5	40.9	42.1	42.6	42.6
137.5°	38.7	38.7	37.6	37.6	37.6	37.1	37.6	37.6	38.2	39.3	39.8
140°	35.4	35.4	34.9	34.9	34.3	34.9	34.9	34.9	35.4	36.0	36.0
142.5°	33.8	33.2	32.6	32.1	32.6	32.6	32.6	32.1	32.6	33.8	33.8
145°	31.0	31.0	30.4	30.4	30.4	31.0	30.4	30.4	31.0	31.0	31.5
147.5°	29.3	29.3	28.8	29.3	29.3	29.3	29.3	28.8	29.3	29.3	29.9
150°	28.8	28.2	27.7	28.2	28.2	27.7	27.7	27.7	27.7	28.2	28.2
152.5°	27.1	27.1	26.6	27.1	26.6	26.6	26.6	26.6	26.6	27.1	27.7
155°	26.0	26.0	25.5	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
157.5°	24.9	25.5	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.5	25.5
160°	24.3	24.3	24.3	24.3	23.8	23.8	23.8	24.3	24.3	24.3	24.9
162.5°	23.8	23.8	23.8	23.8	23.2	23.2	23.2	23.2	23.8	23.8	24.3
165°	23.8	23.2	23.2	23.2	22.7	22.7	22.7	22.7	23.2	23.8	23.2
167.5°	22.7	22.7	22.7	22.7	22.7	22.1	22.1	22.7	22.7	22.7	23.2
170°	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.7
172.5°	22.7	22.7	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.7	22.7
175°	22.7	22.7	22.7	22.7	22.1	22.1	22.1	22.7	22.7	22.7	22.1
177.5°	22.7	22.7	22.7	22.7	22.1	22.7	22.7	22.7	22.7	22.7	22.7
180°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7

(END OF REPORT)